# Disruptive Innovation in the South African Banking Sector: A Case Study of Capitec Bank

by
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Thesis presented in fulfilment of the requirements for the degree of *Master of Philosophy (Information and Knowledge Management)* in the Faculty of Arts and Social Sciences at Stellenbosch University

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March 2020

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## SUMMARY

The South African financial services sector is traditionally dominated by four big retail banks, ABSA, FNB, Standard Bank, and Nedbank. There are significant barriers to entry for new banks in the retail banking sector. The four big banks already have the higher salary earners of the South African population as clients and designed banking products aimed at the established income bracket to compete with each other, leaving out a large potential clientele among the majority of the population without banking services as essentially "unbankable".

In this environment a new entrant retail bank, called Capitec Bank, radically changed the banking services landscape in South Africa by introducing a simplicity banking business model. The Capitec business model and strategy is based on using newly available digital technology to offer banking products and services at very low costs to clients. The digital business strategy has introduced stripped-down branches, and simplified digital registration and transaction application processes. This digitalisation of banking presented a major challenge to the traditional business models of the established banks, with their paper-driven process and complex operations.

The thesis studies the phenomenon of Capitec as an instance of the effect of disruptive innovation. Christensen's theory of disruptive innovation stemming from technological progress is used to explain how Capitec Bank were so successful as a new entrant organisation in the banking services sector. Specifically, the way in which Capitec Bank used digital technology to recruit unbanked customers to participate in the retail-banking sector and so expand the banking market is highlighted. The case highlights that technology alone is not sufficient to disrupt a sector, what counts is how that technology is translated into organisational processes and products.

The thesis describes Capitec Bank's humble beginnings as a collective of small financial institutions in the peripheral micro-lending market with links to manufacturing and distribution organisations. Its trajectory of growth is traced from 2001 when the Bank received the licence to operate as retail bank and how it consolidated its micro landing operations towards transformation as a full retail bank.

Thereafter the disruptive innovations that were instrumental in Capitec Bank's success are described with the help of Christensen's theory: its low-cost business model and networking, the introduction of differentiated operating times, the use of paperless technologies in opening accounts and identity verification process. Also changes to the back-end process for decision making and service experience, compliance with regulation, and handling changes in real time,

as well as offering the global one financial management services in a card. These innovative implementations combining digital technology and process simplifications brought masses of previously unbanked customers into the banking sector and helped Capitec Bank to establish itself as competition to the big four retail banks.

The disruptive innovations have implications for the financial sector, forcing the big four retail banks to respond to the transformational business model of the entrant bank. The transformation of these banks depends on the leadership necessary to break away from traditional management style, the legacy banking model, and old technologies. In order for the traditional banks to compete in the bottom of the customer pyramid with the new entrant bank for market share, their business models had to change down-stream to attract the previously unbanked population.

Christensen's theory of disruptive innovation is commonly applies in the manufacturing sector, but the case of Capitec Bank shows that it can be fruitfully applied to the services sector as well. The case of Capitec Bank shows how new business models and leadership style are as important as technological change for disruption to be successful.

# OPSOMMING

Die Suid-Afrikaanse finansiële dienste sektor word tradisioneel deur vier groot kleinhandelsbanke, naamlik ABSA, FNB, Standard Bank en Nedbank, oorheers. Daar is beduidende toegangstruikelblokke vir nuwe banke in die kleinhandelsbank-sektor. Die vier groot banke het reeds die hoër salarisverdieners van die Suid-Afrikaanse bevolking as kliënte en om met mekaar te kompeteer het hulle bankprodukte ontwerp wat op die gevestigde inkomstegroep gerig is, wat 'n groot potensiële klandisie onder die meerderheid van die bevolking weglaat as in wese "onbankbare" bevolking.

In hierdie omgewing het 'n nuwe inkomende bank, genaamd Capitec Bank, die bankdienste-landskap in Suid-Afrika radikaal verander met 'n bankbesigheidsmodel wat op eenvoud en effektiwiteit geskoei is. Die Capitec-sakemodel en -strategie is gebaseer op die gebruik van beskikbare digitale tegnologie om bankprodukte en -dienste teen baie lae koste aan kliënte te bied. Die digitale sakestrategie het stroombelynde takke ingestel en die registrasie- en transaksie-toepassingsprosesse vereenvoudig en gedigitaliseer. Hierdie digitalisering van bankwese bied 'n groot uitdaging aan die tradisionele sakemodelle van die gevestigde banke met hul papiergedrewe prosesse en ingewikkelde bedryfsmodelle.

Die tesis bestudeer die verskynsel van Capitec as 'n voorbeeld van ontwrigtende innovasie. Christensen se teorie oor ontwrigtende innovasie as gevolg van tegnologiese vooruitgang word gebruik om te verduidelik hoe Capitec Bank so suksesvol was as 'n inkomende organisasie in die gevestigde landskap van bankdienste. Die manier waarop Capitec Bank digitale tegnologie gebruik het om klante te werf (wat deur gevestigde banke as onbankbaar beskou is) om aan die kleinhandelsbankwese deel te neem en so die bankmark uit te brei, word spesifiek belig. Die gevallestudie beklemtoon dat tegnologie alleen nie voldoende is om 'n gevestigde sektor te ontwrig nie; wat eerder tel is hoe die tegnologie in organisatoriese prosesse en produkte ingebed word.

Die tesis beskryf die nederige begin van Capitec Bank as 'n kollektiwiteit van klein finansiële instellings in die periferale mikroleningsmark met relasies in vervaardigings- en verspreidingsorganisasies. Die groei-trajek word vanaf 2001 nagespeur toe Capitec Bank 'n kleinhandelsbank-lisensie ontvang het en daarmee saam die mikro-leningsbedrywighede gekonsolideer het om volledig in 'n kleinhandelbank te omwentel.

Daarna word die ontwrigtende innovasies wat tot die sukses van Capitec Bank bygedra het deur die lens van Christensen se teorie beskryf. Hieronder tel die laekoste-sakemodel en netwerke, die bekendstelling van gedifferensieerde bedryfstye, die gebruik van papierlose

tegnologie om rekeninge te open en om identiteit te verifiëer. Veranderinge aan die besigheidsprosesse vir besluitneming en terugvoer oor dienservaring, die nakom van regulasies, en die intydse hantering van veranderinge, sowel as die aanbod van die wêreldwye finansiële bestuursdienste op een kaart. Hierdie innoverende implementasies wat deur digitalisering vereenvoudiging van prosesse moontlik maak, het massas voorheen ongebankde kliënte deel van die banksektor gemaak en Capitec Bank help vestig as 'n mededingende bank in die kleinhandelsbank-landskap van Suid-Afrika.

Die ontwrigtende innovasies hou baie implikasies vir die finansiële sektor in. Die groot vier kleinhandelsbanke is deur die ontwrigting gedwing om op die transformerende sakemodel van die toetredende bank te reageer. Die transformasie van hierdie banke hang saam met die leierskap wat nodig is om weg te breek van die tradisionele bestuurstyl, die ou bankmodel en gepaardgaande tegnologieë. Vir die tradisionele banke om met die toetredende bank te kompeteer vir klante aan die onderkant van die klantepiramiede, moes hulle sakemodelle verander om die voorheen ongebankde bevolking te lok.

Christensen se teorie oor ontwrigtende innovasie is algemeen van toepassing op die vervaardigingsektor, maar die geval van Capitec Bank toon dat dit ook vrugbaar in die dienstesektor toegepas kan word. Die geval demonstreer hoe nuwe sakemodelle en leierskapstyl net so belangrik is as tegnologiese verandering om ontwrigting suksesvol te maak.

## TABLE OF CONTENTS

## TABLES



## FIGURES

# 1 INTRODUCTION

In 2001, the new entrant retail bank in South Africa by the name of Capitec Bank was established. The executive leadership of the bank's innovations has come to the attention of the financial sector (Capitec Bank Holdings Limited, 2011). However, the bank has introduced innovation methods that are disruptive to the financial sector and challenge the practices and normative behaviours of managerial bodies in the banking industry – an industry that is highly regulated by several laws and regulatory bodies.

Innovation is the process that produces outputs from disruptive technologies. The innovative process serves the purpose of catalysing the replacement of existing products or services with ones that are more user-friendly, efficient, easy-to-use, and affordable than the market standard. In Christensen's book, *The Innovator's Dilemma*, he defines "disruptive innovations" – technologies that bring about new products that are inferior option and services that are demanded by a non-mainstream, niche market sector. These new products and services should experience a performance improvement over time, eventuating in a competitive position in the mainstream market. This improvement should therefore also increase the appeal to the primary target market. The book further describes innovations as originating from innovators who are entrepreneurial-minded newcomers to the market (Christensen, 1997).

Christensen, along with academics and his industry colleagues, continuously improves upon the theory of disruptive innovation in order to accommodate other areas of practice in different industries. The financial industry has found itself wonting to introduce innovations based on technologies that exist in the current market, for example: cell phone banking.

Putting it in context, the services the banks are offering on products are simpler, cheaper, and with improved convenience to the customers can use at the comfort of their homes. Take example of different industries like traditional newspaper disrupted by online news services and music download have disrupted the CD industry (Christensen & Overdorf, 2000).

The disruptive innovation is been explored in other industries, on the bases that it focuses on the high technological industries. However, it not really been explored deeply in the financial sector which is highly regulated.

There are commentators in the financial sector who, after observing the way that Capitec Bank implemented their technologies to provide cheaper products and services to the bottom of pyramid population, believe that the bank is a disruptor in accordance with Christensen's theory (Innovation Agency, 2011). In the disruptive innovation: case study of Capitec Bank its observed that the bank uses existing technologies in technology sector to introduce new products and new services into the new-targeted market. The bank adopted the disruptive innovation road to introduce transparent and simplifying products and services on the backbone of technology.

## 1.1 Research Problem

Disruptive innovation is considered an enabler of competition and high profit growth of business. However, incumbent organizations struggle to adapt when faced with the disruptive innovations of new entrants. Numerous organizations fail to continue topping the market they dominate and simultaneously management faces challenges of dealing with the changes that is brought by the disruptive innovations in their domain market.

Disruptive innovation is often the result of new entrant organizations to introducing services and products that are under-offered by the mainstream market. Disruptive innovations enables new organizations to offer products and services that are cheaper, simpler, or more convenient to use and these features make expansion of the market possible for these organizations (Christensen & Raynor, 2003).

Most of the innovation literature describes the phenomenon of disruptive innovations in a general way with examples from specific areas. On whole, the literature is industry related, with the biggest focus on disruptive technology. At the industry level areas can be identified that were effective for disruptive innovation, namely value networks, business model and technology application. In assessment, one could say that at industry level there is not enough research about the effects of disruptive innovations.

Christensen (1997) argues that management can better prepare for the advent of disruptive innovation and this will assist organizations to cope with the disruption and continue competing. Managers can learn the effects of disruptive innovation and then position their organizations appropriately during the transition phase of disruption innovation (Christensen, 1997).

The practical relevance of Christensen's ideas can contribute positively to the theory of disruptive innovations. Considering the developments at market and industry level in terms of an established theory like that of Christensen will add value to the lack of intense research at the market level or industry level. Thomond and Lettice argue that strategic decisions makers could learn valuable lessons from a better understanding of disruptive innovations (Lettice & Thomond, 2003).

This thesis gathers information on the case of Capitec Bank, and in particular in three main categories of the bank's value network, namely:

- Technology platforms
- Mobile technology
- Accessibility

Together these three categories drive financial inclusion of a population that was unbanked, who can interact with their banking institutions, thanks to improved and streamlined access. Up until now, there has been no complete analysis with relation to disruptive innovations in the retail bank industry and the case of Capitec Bank is therefore an opportunity to see how disruptive technologies were concretely used to transform the traditionally conservative banking sector.

## 1.2 Research Questions

Based on the background discussion above, Researcher select two issues to analyze:
How did the new entrant bank implement disruptive technological innovation in service of finding a niche market? In addition, once that is determined, what are the implications of such disruptive innovation at the banking industry?

## 1.3 Purpose

The primary purpose is to describe the case of the new entrant organization relying on being a disruptor to establish a foothold in the industry. The secondary purposes are to assess the potential effects of the new entry organization using disruptive innovation in a specific industry. In addition, the secondary purpose, which is that this thesis shall describe how banking industry have been affected due to the disruptive innovation.

The findings of the primary purpose will contribute to the theoretical field of disruption innovation and have practical relevance. The findings of the secondary purpose will empirically add to the research on the retail banking industry.

### 1.4 Delimitations

The empirical study is delimited to the financial banking sector of the retail banking industry in South Africa, which also includes the micro-lending segment of that market.

Some of the financial institutions—especially the big four banks, namely Nedbank, Standard Bank, First National Bank (FNB) and Amalgamated Banks of South Africa (ABSA)—that provide retail banking services may have implemented some of the disruptive innovations themselves. However, in accordance with our purpose, Researcher are focuses primarily on the new entrant bank taken as our case study. This is justified, because of the meteoric rise of the new entrant compared to the more established banks in a mature retail banking market. Consequentially, less focus will be provided that other segment and other banking participants in those segments.

Capitec Bank was launched in 2001, its late entry to the market was one of the enablers of the disruptive innovation as discussed in the background of the thesis, and the empirical study will therefor focus on the time from 2001 until 2017.

### 1.5 Structure of Thesis

The thesis comprises of the following chapters:

*Chapter 1: Introduction*. The background of both the theory of disruptive innovation and the new entrant bank is presented. The background is linked together with the problem discussion, which leads to the purpose of the thesis, the methodology of the thesis and delimitations.

*Chapter 2: Theory of disruption innovation*. The theory chapter covers four theoretical fields in accordance with what is presented in the methodology. It leads to a theoretical framework identifying aspects that can be affected by disruptive innovation.

*Chapter 3: The Rise of Capitec Bank.* The chapter shares the background and the origins of the new entrant bank in the financial industry. It focuses on the time period from 2001 until 2017. The case description follows the aspects identified in the theoretical framework to illustrate how the banking sector changed since its formation.

*Chapter 4: Disruptive innovation in the bank*. This chapter describes and analyses the innovations that were adopted in the bank. The aspects from the theoretical framework guides the presentation of the case study. Additional aspects, that were not discovered from the literature, but that were discovered in the case study are presented as well.

*Chapter 5: Implication for banking sector.* This chapter considers the implications for the banking sector and how it has been affected by disruptive innovations, how it supports the empirical studies to be linked with the thesis primary purpose. The implications of the case study for practical applications are considered as well.

*Chapter 6: Conclusions.* The concluding chapter summarizes the result of the analysis and discusses how it matches the purpose of this thesis and proposes avenues for future research.

## 1.6 Methodology

The case study chosen based on the relevance and significance influence within the banking sector. The study of disruptive innovation is quite recent and, as current example, Capitec is a case study that has available information in the open source.

The purpose is to extrapolate to the retail-banking sector, however, there is a limitation for analysis in that the whole sector is not analyzed research wise, but there is a focus on the single case study of the new entrant bank. The rationale is that the gains made in the banking sector by the new entrant would offer much to learn about how disruptive innovations become part of concrete business strategy. Therefore, the study based on a single case study, rather than a multi-cases or comparative study.

Christensen (2006) and Yin (2003) point out that, cases can be explanatory, exploratory, or descriptive. The study purpose in my study case is to identify the effect of disruptive innovation and to explain how the four incumbent banks affected. Therefore, the thesis fits the explanatory and descriptive case study models (Yin, 2003).

Information regarding the study case was gathered from different numerous sources. These include some financial data and annual reports to see how innovation has been invested in and what value it created. The innovation in the introduction of new organization or entrant institution enabled the introduction of disruptive innovation.

One could also interview representatives from Capitec Bank, but since there was sufficient publicly available open source information about the bank and its business strategy available, it was possible to describe the case entirely based on secondary data, which also included press releases published interviews conducted with top management of the bank.

Furthermore, the information about the new entrant bank in the financial market that is very much dominated by four retail banks and highly regulated. There is monopoly of big four retail banks in the market, it becomes very difficult to obtain operations license for new entrants with so much regulations and monopolized space. The published information on case study provides the management entrepreneurial leadership of a new entrant organization with a challenge of breaking down the barriers to entry and of dealing with the regulations in the banking sector.

The theory done to analyzed and applied to the case study, to produce the basis for the findings and the implications for the banking industry as a whole and the effects of disruptive innovation at the level of the financial market. I have combined the qualitative and quantitative methods in sense that the bank background is a qualitative matter and comparing data from different incumbent firms is a quantitative matter.

Validity and reliability of the case study should be taken very seriously; this is according to Bryman and Bell (2005). Answering the validity and reliability of the research, is only proved if the same effects and conclusion from the finding will continue yield the same outcome as this research (Bell, 2005). The research methodology used illustrated in **Figure 1.1**.

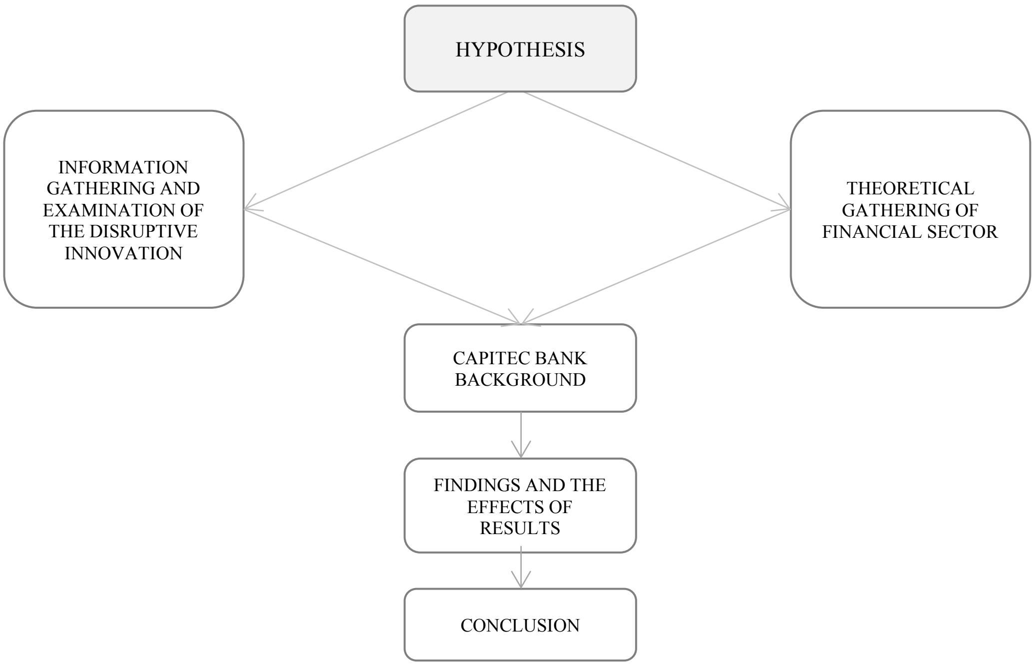



**Figure 1.1**: Illustrate of working process of this thesis

The data that is collected from the annual reports give a bird's eye view of the development change in the banking sector and how it is unfold since the new entrant appeared. There are number of sources where more information was gathered, the articles from industry publications, newspaper reports, the web pages of organizations and the financial industry, textbooks and scientific journals.

With the deductions from the data collected, some of the practicality can be explain in some form of examples of things that are happening in the environment, e.g. paperless services. By examining the situations, it can showed how disruption innovation had its effect on the banking services in the developing market. The potential effects of disruption innovation theory are shared through the theory implementations and have opened the channels to see the practicalities of theory combined with practices.

The interpretation of the various sources was furthermore facilitate by the researcher's own volunteer experience in opening and use of an account with the Global One Card. However, this was not a case of action research or participant observation, the study and arguments are based solely on secondary and publicly available data, although the researcher's being at bottom of the pyramid experience certainly helped the researcher to select, contextualize and interpret the secondary data collected.

# 2 DISRUPTIVE INNOVATION

Organisations have to be strategic in order to survive. In their sector and given their environmental and technological constraints, they choose a particular offering of services to attract customers in pursuit of profit. The following section provides the background of theories of innovation and disruption that try to understand how emergent technologies make new business strategies feasible.

## 2.1 Theoretical Underpinnings

Both Polanyi (1967) and Arrow (1962) state that knowledge is context and space dependent. The diffusion innovation model assumes that a number of potential sectors that exist in the market will adopt innovation. This may be influenced by external and internal factors (Leonard & Sensiper, 1998), (Shapiro, n.d.). Internal factors, like operations and performance for growth in organisations, depend on how the organizations independently organize themselves to innovate for economic progress. This suggests that most organizations' management rely solely on implementing incremental innovation, due to the assumption that starting a new model is tedious. There is enough literature research from researchers such as Robert and Amit, 2003, Damanpour et al, 2009 showing how innovation has helped organizations to focuses on improving their financial performance and growth.

The definition of innovation from Rogers 1962, it says that: a new process in which enlightenment or ideas that are transformative to commercial successes in the market. This area of innovation represents the attractive areas of investment for organizations (Rogers, 1995). Most researched literatures or body of knowledge on sustainable innovations was found to be focuses on organizations that aimed to maintain profit margins by improving the product performance they currently served their major customer. This brings to light former major customers that were left behind due to price and/or need changes, who ended up becoming underserved customers (undesired market). This provides the context at which sustainability is focused.

## 2.2 Sustainable Innovation

Christensen (1997), in his book, defines innovation as a process that incumbent organizations continue to follow the same business model, by only improving on readily available and familiar products or services, performance driven improvements, the expensive cost driven model and targeted high-end customers. He also establishes that the sustainable process are led by dominating organizations in the market (Christensen, 1997).

In the recent years of management lexicon, academics (researchers) have introduced a new body of knowledge on innovation theory, which distinguishes the difference between innovation types. The findings have expanded the main stream of management body of knowledge and are known as disruptive innovation. This new term has broadened the scope of innovation and how it is being used at the industry level (Christensen, 1997).

The disruptive innovation has its roots or heredity from Schumpeter (1942), where He argues that "creative destruction" is a form of litmus for improvement and growth in economy (Caballero, n.d.). In recent years, "creative destruction" took a different form and was enhanced by Harvard Business School professor Christensen in his book in 1997 "The Innovators Dilemma" (Christensen, 1997). Table 2.1 below provides a timeline of theories in relation to disruptive innovation.

Disruptive innovation has become the strategic relevant management term that is found in the boardroom of directors and the entrepreneurial, inventors as management jargon. New start-up organizations that intend to enter and have already entered a sector have tried to follow the models provided by theory in the context of disruptive innovation strategies (Yu & Hang, 2010).

**Table 2.1**: Innovation theory time line

| YEAR | RESEARCH |
|---|---|
| 1942 | Joseph Schumpeter: Creative Destruction in "Capitalism, Socialism and Democracy". Harper & Brothers |
| 1986 | McKinsey & Richard Foster: Technology S-curve and "Discontinuities". Innovation: The attacker's advantage. NY: Summit Books |
| 1990 | Henderson and Clark: Architectural Innovation |
| 1991 | Geoffrey Moore: Crossing the Chasm. Marketing and Selling Technology Products to Mainstream Customers. NY: Harper Business. |
| 1992 | Clayton M. Christensen: The Innovator's Challenge: Understanding the Influence of Market Environment on Processes of Technology. Development in the Rigid Disk Drive Industry, Dissertation; "Exploring the limits of the technology S-curve", in: Production and Operation Management, 1(4), 334-357 |
| 1997 | Clayton M. Christensen: The Innovator's Dilemma; 7 papers on related issues |
| 2000 | Christensen and Overdorf: meeting the challenges of disruptive changes |
| 2001 | Richard Foster and Sarah Kaplan: Creative Destruction: Why Companies That Are Built to Last Underperform the Market–and How to Successfully Transform Them. NY: Doubleday |
| 2002 | Christensen and Overdorf: meeting the challenges of disruptive changes |
| 2003 | Christensen: The Innovator's Solution |
| 2004 | Christensen, Anthony and Roth: Seeing What's Next |
| 2009 | Christensen, Grossman and Hwang: The Innovator's Prescription |

**Source**: Adopted from "A Reflective Review of Disruptive Innovation Theory" by Yu and Hung, 2010 (Yu & Hang, 2010)

### 2.2.1 Christensen's theory of disruptive innovation model

During 1997 the foundation for the new management terminology, 'disruptive innovation', was prepared and made possible through the seminal lecture by Harvard School of Business professor Clayton M. Christensen. Disruptive innovation was presented as the new attractive model for management. It challenges the well -entrenched knowledge of incumbent organizations in every sector of market with its management practices (Christensen, 1997).

The introduction of the model was intended to address a problem that most managers in organizations faces when new market changes happens, due to market condition or customer needs changes that are causing organizations to fail or progress with profit.

Accordingly, when the market faces discontinuous technology or a new technology era, the mainstream organizations, especially the leading ones, tend to lose their innovative sharpness (edge) due to their entrenched business models and decision-making attributes (Christensen, 1997). They lose their lead in the market, due to not responding in time for change. It is correct to say that the organization's core business model has reached its life span and needs review. The leading organizations cannot produce beyond the leverage limit (threshold), and winners happen to become losers in the entrenched market (Christensen, 1997).

Christensen's book (1997), discusses the types of innovation currently seen in the market including disruptive and sustainable innovation. He states that the word innovation is a change of context addressed by number of literatures based in management arena. It can be said that innovation around the market are brought to life by disruptive technologies and sustaining technologies.

*"Innovation is often given complex definition, we prefer the simple one:*
*'new idea that work.'"* By Geoff Mulgan (Oudrhiri, 2014)

**Definition of Disruptive Innovation** (Technology): Currently scholars have failed to present a specific adopted definition of disruptive innovation. However, some commentators define it as a process that assists a new organization to introduce a new business model. Creating a specific new market, by introducing a cheap product or service that has a low price (affordable), with the focus of a targeted customer base and which over time the new organization grows and replaces a leading organization in the market (Christensen, 1997) and (Tellis, 2006).

According to Christensen and Overdorf (2000), they describe a process where a new organization enters a sector, bringing a new model, creating a new market by which a new product or new service is introduced, and is inferior in quality by the standards of performance metrics, they are simpler, convenient, and less expensive. Eventually the product or services takes center stage and competes with established products in market (Christensen & Overdorf, 2000).

**Table 2.2:** Some examples of disruptive innovation

| Disrupted Technologies | Disruptive Technologies |
|---|---|
| Tom Tom navigations | Car navigation |
| Fixed line Telephone | Cellular Phones |
| Boom Box music player | Walkman |
| University | e-learning |
| Traditional banking | Internet Banking |
| Doctor consulting room | Retail medi-clinics |
| Portable CD players | iPod and Other Digital Players |

**Source:** Adopted from disruptive products innovations 2012, (Islam & Ozcan, 2012)

### 2.2.2 Christensen disruptive innovation model

Christensen has made a critical contribution towards the literature of management strategy. He reinvented a way to introduce disruptive innovation as a hot topic in the management world. For the context of this discussion, the two definitions above will be adopted to correlate with the case study.

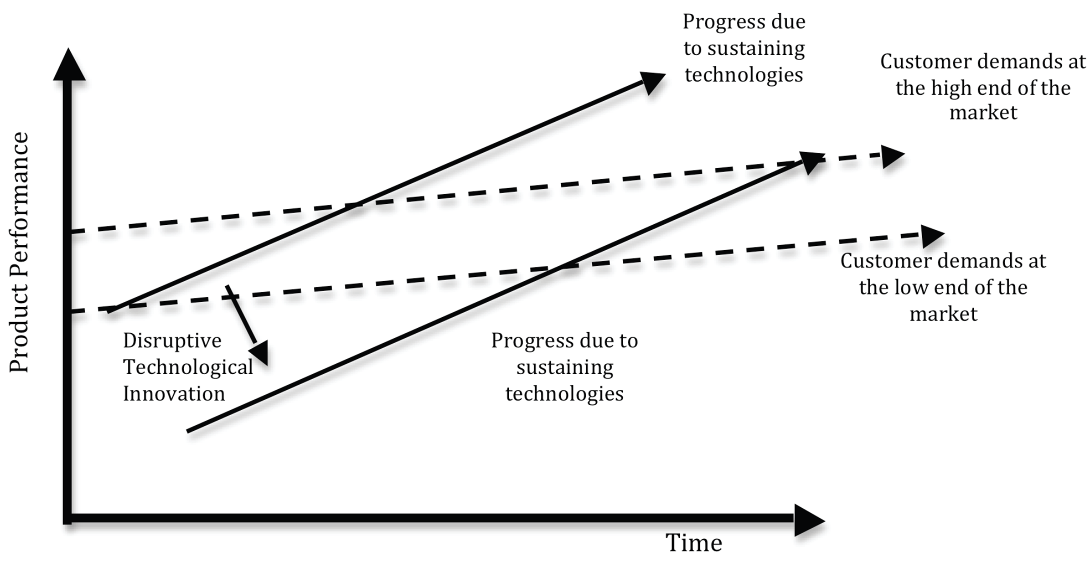
Management from incumbent organizations are concerned about the performance of their products and profit growth margins thus neglecting the new entrant organizations. According to Christensen (1997), all management in organizations has a specific mandate to meet performance driven targets every financial year. Organizations review their reports, in order to gauge how they performed throughout the financial year. Thus, the reason most managers pursue continuous innovations in their management roles (Christensen, 1997).

The findings reported at the end of the financial year are an indication of performance improvement or failure in the organization. This indicates whether the organization has implemented strategies properly and monitored progress efficiently. Christensen (1997) continues to say that organizations are basing their performance trajectories on the analysis of customer interest in their products or services (Christensen, 1997).

Some customers are very demanding in terms of quality and are willing to pay for the top products or services. However, others do not demand high-end quality but are satisfied with simple functionality and cheaper prices. Figure 1 illustrates the performance trajectories of two types of customers. Research found that high-end customers have been attended to by regular improvement of product or services, these products and services are improved and outperformed by the same improved products. It means that the advancement of products and services overtakes the ability to use the products and services by majority of customers.

The process of performance evaluation is linked with the technology performance S-curve framework; it explains the substitution of old technology with new technology at the market level. Improvement in technologies should be monitored and managed. Due to the technology improvement, they followed an S-curve pattern (Christensen, 1997). Christensen's theory of 1997, in the context of the performance S-curve, shows similarities with other theories that came before it. There are researchers who have done research on technology performance. According to their findings, the effort of plotting the performance of technology over time yields the result that mimics the S-curve.  This information comes from the theory of technological evolution that seemingly follows a distinct pattern by Utterback (1974) and Foster (1986) (Tellis, 2006).

**Figure 2.1**: Performance plot trajectory




**Source:** Adopted from innovator's dilemma by Christensen, 1997: xix

From Christensen (1997) theory on **figure 2.1**, the vertical axis is the product performance, the horizontal axis is the time taken by the product to perform:

- The lower solid lines represent the Entrant new product in the market, it represents product or services progress for some time and the way it is been fully used and accepted by new customer.

- The upper solid line represents the Incumbent product in the market. It represents the amount of accepted uses of the product or services by the high-end customers over time.
- The doted bar lines represent the limitation of products uses. It shows the rate at which the customers are very comfortable with the use the product or services and tolerance of absorbing the product or services.
- The gap between the two solid lines represents the improvement of the disruptive technologies. Over time, the Entrant or organization will improve their products or services such that it will reach the Incumbent doted bar line and end up replacing the product or services.
- At the above the limitation line (dotted line) of the products or services at the Incumbent organization, it is the higher end of the market where demand for sustainable technologies is given attention by the incumbent organization.

Inversely, at the low limitation line of the entrant organization, the lower-end customers are absorbing the use of the product or service that is offered by the new entrant (Christensen, 1997).

According to Christensen (1997), new organizations will identify the needs of the underserved population and create a market out of those needs. Come up with strategies to introduce products or services into those markets. Since there is no one servicing the market, it brings challenges to customers' needs whom have not been serviced by the entrenched market (Christensen, 1997).

Incumbent organizations continuously upgrade products and services, with the aim of capturing the more attractive, highly demanding customers in the market. As a result, the products and services that were previously attractive become unattractive to the high-end market. This leads to a new kind of customer left behind due to not getting products or services in the same market. This translated into opportunities for disruptive innovators, as Christensen (1997) explained. He says that the Entrant organization brings new solutions to the unmet needs of customers. This new need change is informed by the high-end product or services no longer give value to the low-end customer (Christensen, 1997).

Christensen and Raynor in 2003 wrote, "Disruptive innovations establish its self in the market, and eventually find more attention and it improves. The product or services find that foothold in that small market, so it ends up crafting a path that will challenge for competition in the entrenched market" (Christensen & Raynor, 2003). Christensen (1997) addresses the management style and practices of larger organization concerning their approach to disruptive technologies. He suggests that they stop utilizing traditionally established business market rules or principles in management.

Christensen continues to highlight the following realities by providing the disruptive framework below (Christensen, 1997):

> ***Companies depend on customers and investors for resources***. *The knowledge being embedded in the process and the organization specific assets such that it can configures its organizational form and its knowledge assets.*
>
> ***Small markets don't solve the growth needs of large companies.*** *It means that the small firms should focus on dealing with its small market opportunities not concerning itself with the big market.*
>
> ***Markets that don't exist can't be analyzed***. *The formal market is based on the traditional business studies and analysis, while the informal market there is no monitoring and analysis is very insignificant to the established business market.*
>
> ***An organisation's capabilities define its disabilities.*** *The competences, knowledge assets and the entrepreneurial underpin the origination in the market. Capacity to take opportunities.*
>
> ***Technology supply may not equal market demand***. *The product or services that are in the market they do not reflect absorption or the use of technology in the market by customers.*

On the other hand, the above principles indicate how management fail to adopt the new changes in technologies, since the management practices and knowledge are embedded in business market routines and process. In other words, due to the lack of organization management capacity to astutely and strategically seize opportunities to adopt innovation technologies, they become the barrier to innovation (Christensen, 1997).

Christensen's iconic example of disruptive innovation comes from the manufacturing industry of disk drives. He dedicated a full chapter proving research evidence on the history of disk drives, the effect and the technological changes the industry went through. IBM manufactured the first disk drive between 1952 and 1956. It was called the Random Access Method for Accounting and Control (RAMAC). It was followed by the introduction of rigid disk in 1961, thereafter by the floppy disk drive in 1971, and continue with the Winchester architecture in 1973 (Christensen, 1997).

Disk drive can be found in every computer even today, they are meant to read and write on a rotating disk. The drive uses electromagnetism to read and write from the disk while it rotates quickly in the drive. While IBM has pioneered the disk drive industry, some new entrant organizations like Nixdorf, Wang and Prime, came to the market introducing similar disk drives but at discounted prices to the IBM clients. By the end of 1976, the entrant organizations had produced $1 billion worth of disks in the market. As time went on, the market had produced $18 billion by the year 1995. Between the periods of 1956 to 1995, the industry had number of new entrant originations, which mostly consisted of start-up organizations specializing in disk drives (Christensen, 1997).

Christensen (1997) regards the disk drive as having number of patterns in the innovation process. He firstly notices that in the early times, the innovations were straightforward. The technology did not evolve much in terms of the functioning of the product, other than using new packaging to give the product an upgrade. He secondly notes a new pattern that emerged, where management of organizations opted to sustain technologies. These findings are plotted against the performance trajectory map. They give a result that new technologies were not disruptive as they were merely upgrades and not changes in the market. The last pattern he notes is that the entrant organizations were the ones coming up with the new development and new ways to do things. The entrants led the way by introducing simple and radical technologies in the industry. The incumbent organizations just continued sustaining their technologies (Christensen, 1997).

## 2.2 Example of Portable Radio: Sony Transistor Radio

The Walkman was a cassette player that was introduced around 1979, it was the first portable player produced by a company called Sony. It came in at the time of radio boxes, systems that used radio vacuum-tube radios and boom boxes. The manufactures of the bulky radios did not worry about the newcomer; they continued selling the big radios at high prices, believing the new comer will not sell like the bulky radio. Sony did not worry about the current market, but targeted the underserved market the youth population (Islam & Ozcan, 2012).

Sony had to find a way to sell the Walkman to the youth, through new distributers, as the main distributors were servicing the bigger radios that were still using the tube technology. The new distributors knew how to sell products to the youth (Islam & Ozcan, 2012). The youth played their music throughout the 1980's, the Walkman technology improved to the point that it became good enough to compete with the vacuum tube radios (Christensen & Raynor, 2003), (Islam & Ozcan, 2012). After the Walkman, around 1984 Sony introduced another portable product that used a Compact Disc player. Sony dominated the portable music market; it continued doing so for a long period. The number one spot did not last indefinitely, as a new trend came to the market by the name of MP3 music format, which is a digital space (Islam & Ozcan, 2012).

Consumers started to be familiar and enjoying the digital space, they downloaded free music illegally from companies that provided music in MP3 format. Consumers used the internet network to connect their MP3 devices, which were low in memory to hold number of songs. Apple introduced the iPod in 2001 and 2003 introduced the iTunes software, where the product and services became available to customers were they had access to inexpensive music in the digital space. At this stage, the digital music product and services had disruptive innovation. The digital technology of iPod and iTunes disrupted the portable market by replacing all the technologies that were there before, the cassette technology, and the compact disc technology and the portable music players. The table below shows the history of portable music player (Islam & Ozcan, 2012).

**Table 2.3**: The trends of disruption in digital music

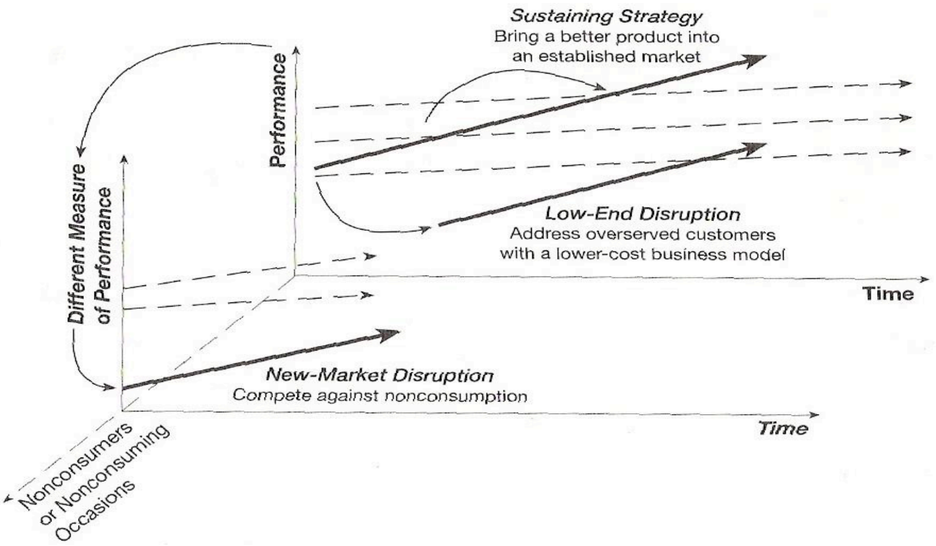
| Period | Disruptive Technology | Disrupted Technology | Notes |
|---|---|---|---|
| 1970 | Sonny Walkman cassette player | Boom Box (Ghetto Blaster) | The generation of youth around the 1970 has were the fanatics of boom box music systems that they carry around with and uses radio frequency. Different organisations were producing different types of boom box. Sony caught boom box producing organisations by surprise around 1979 by introducing portable cassette, the youth fell in love with instantly |
| 1980s-1990s | The Discman and Portable CD Players | Sony Walkman Cassette player | Sony continues to surprise incumbent organisations by introducing an innovation of portable CD player in 1984. However, incumbent organisation became imitators and produced portable CD players, which lead to the end of cassette player. |
| 1990s-2000s | iPod and Other Digital Players | Portable CD players. | With the spread of internet usage to the population, organisations introduce in the 1990's digital flash audios. The digital audios had some challenges with their battery life. However, in 2001 Apple organisation brought a new product in digital space called iPods, following couple of years in 2003 they introduce an iTunes which is online music library. The combination of the two products was very impressive towards customers and became the in-things in the market and the adoptions became the most remarkable one. The online music started to dominate and the sale of portable CD became disappearing, was disrupted by iPods and iTunes market. |

**Source**: Adopted from case of portable music players (Islam & Ozcan, 2012)

Since the internet was commercialized, it was observed that the trend of music became digitized. As observed from industries introducing the portable gadget and further moved in the direction of downloadable digital music online.

According to Christensen (1997), customers gain added value from leadership creativity when organizations embrace disruptive innovations. This value created for customers gives an organization a foothold in the market and advances its products and services to compete in the market. Christensen continues to say that the new product or service competes on his or her own level. Meaning that the disruptive product or service creates his or her own new performance curve due to having an exclusive market. The figure 2.4 explains the new product market curve.

**Figure 2.2:** Three-dimension categories of disruption




**Source:** Adopted from the innovation's solutions by Christensen, C. M & Raynor, M.E, 2003 (Hansen, 2010)

## 2.3 Disruptive innovation

However, Christensen (1997) recommends that organizations' management should stop following well-established norms of research and sustainable innovations that characterize the entrenched markets. The following elements adopted from the five principles of disruptive technologies discussed in the above paragraphs.

The principle of disruptive technologies above derives four elements to be exploited and considered in the new market environment that is regulated by a new entrant organization. These principles require a paradigm shift from management approach; it supports the recommendations and needs for managers to exploit the knowledge and diffusion in their organizations. Christensen introduces four elements of Disruptive innovations **figure 3** adopted from Grandlichman (2015) (Grantlichman, 2015):

1. Regulations and standards that facilitate change
2. Low-cost, innovative business models
3. Economically coherent value network
4. Sophisticated technology that simplifies

## 2.4 Sophisticated Technology that Simplifies

Organizations should continuously adapt to technologies that will give them an advantage over their competition. Many organizations still rely on old systems known as legacy systems. Because their critical systems like Human Capital, Customer Database, Financial Systems and Supply Chain Management. Many organizations have structures that operate in silos where the procuring of new products and technology occurs independently from each structure of the organization. Meaning, legacy systems are also operated with silo attributes.

With the emergence of new knowledge and new ways of doing things, it is found that organizations are challenged to be creative in exploiting the knowledge and technology that the organization has acquired and adapted with origination resources. The Implementation phase of knowledge follows the exploitation process that generates the diffusion process in the organizations (Gjerding & Lund, 1996).

Christensen argues and proposes that the technologies that are introduced in the organization are not interesting, they are basic and are inexpensive to have or to use and their performance does not concern the low-end market. The primary purpose is to improve the customer's experience to access resources, real time access to applications, data, network and business (Christensen, 1997).

## 2.5 Regulations and Standards

Industries are regulated for a number of risk related purposes. Most of the objectives of regulation is to make sure that the market or industries are mitigating risk. Strategies and technological advances may be converging to create an aggregated industry or market. That way different regulations need to start adapting to the new industry or market created. For example, in the financial sector, the purpose of the regulation is to protect consumers from opportunistic behavior, enhancing the efficiency of financial systems, achieving social objectives and protecting financial systems from risk or crime and other vulnerabilities (Goup, 2000).

In the South African banking context, a financial sector charter initiates transformation and inclusiveness in the commercial banking. The charter's purpose was to direct the banking sector to accommodate the low-income sector in financial services. This charter is meant to facilitate standards and regulations on economic transformation, participation of low-income populations in the financial market, efficient running of the financial sector and contribution to equitable society (The Banking Association South Africa, 2004). Regulations and standards can enable change in any sector of the market, the complexity will depend on the context in which the standard or regulations are introduced in the market and how inventors and imitators respond to it.

## 2.6 Low cost innovation business model

Management literature has been a road map of any business in detailing how the organization should make money and how it aims to give customers valued experiences (Chesbrough, 2010). Johnson et al (2008) propose a definition that says the business model is a creation process whereby delivering value in four-elements, namely customer value proposition, profit formula, key resource and key process (Johnson, et al., 2008).

The history of the business model has been a key driver for business growth, in order for it to provide growth it needs to fit in with all knowledge assets of the organization. This means that the organization's capabilities are clearly identified, which can be a framework of a low cost model, finding a specific market and target specific customers to offer a valued experience. Christensen, (1997) says that the business model should specify which target market it intends to address, its cost model of the targeted customers and what collaboration or partners are necessary.

## 2.7 Economically coherent value network

Are customer satisfaction, benefits and experiences that are generated by solutions and networking through an organization creative process, aimed to resolve specific needs and wants from specific targeted customers (Barnes, et al., 2009).

Research by Christensen, Bower and Overdorf (1995 and 2003) concluded that organisations have a tendency to believe that they know what value customers can derive from their product or service offering. However, customers are the only ones that know what value they receive from products and services (Bower & Christense, 1995), (Christensen & Raynor, 2003).

Overall, in Christensen's epilogue in the disruptive innovation dilemma, he provides some guiding element to be adopted or can be adopted during the process of a new market creation innovation. The diagram bellow shares Christensen elements of disruptive innovation.

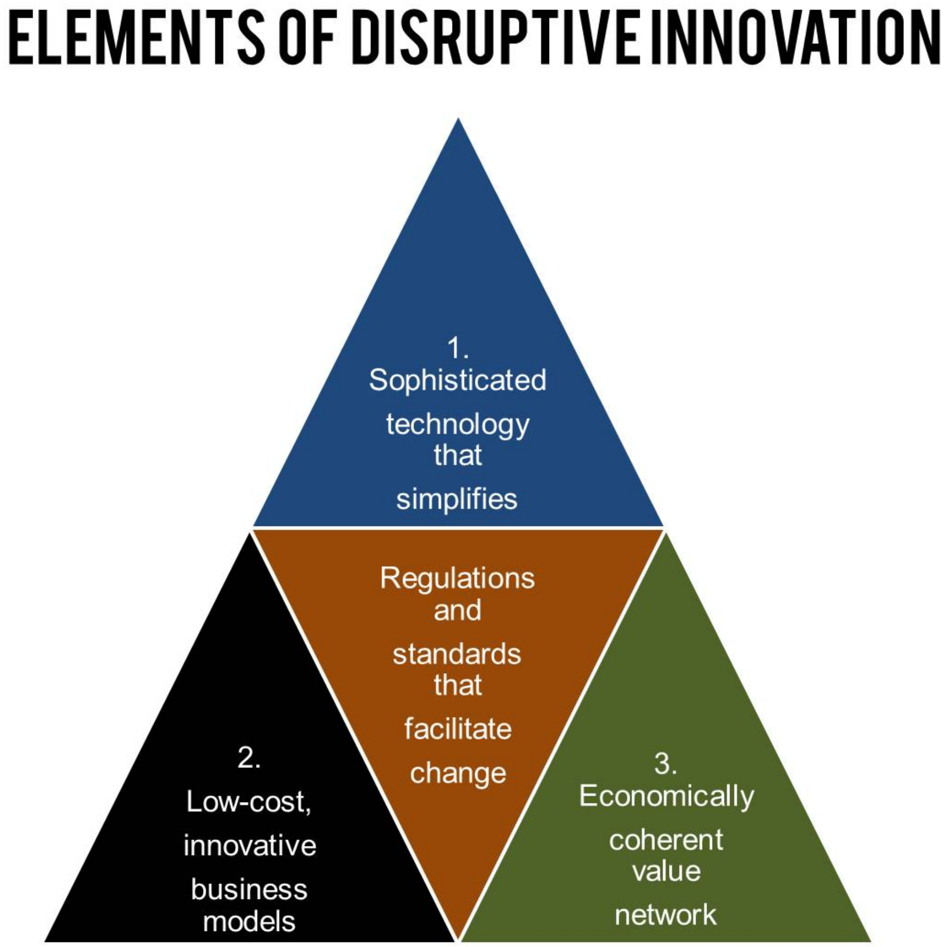
This chapter has explored two key phenomenon innovation and disruption innovation. Both categories defined differently, innovations argued to be the continuous improvement of products of service while disruptive innovations are the ones that start new markets.

Christensen (1997) has proposed a framework for disruptive innovation, which will measure how the performance of new products and services how are measured to show the competition and adoptions by customers in niche market. Christensen (1997) argues that the performance of a product continues to grow with time and compete in a real market with other products or services until it replaces incumbent organizations. He does not provide a conclusive definition of disruptive innovation as terms.

Christensen (1997) introduced a phenomenon in a seminar lecture to the management literature, with the purpose to understand Christensen's lecture and outcomes of proving principle models that guide the process of the phenomenon. It described how organization leaders fail to see the technology changes in the primary market.

This research follows a deductive approach; the next section will begin with the theoretical background of the financial market. More specifically, the informal micro-lending background and the rise of Capitec Bank. These will help to measure and discuss the four elements in practices with the theory.

**Figure 2.3:** Elements of disruptive innovation by Christensen 1997.




**Source**: from Christensen 1997 (Grantlichman, 2015).

## 2.8 Disruptive innovation in the banking sector

The literature documentations that aggregated this research process exemplify information technology (IT) exploitation and diffusion by the banking sector. Information Technology (IT) and Information Communication Technology (ICT) has a potent influence on aggregating the banking sector strategic business models for services and products. Hence the degree of influence in disruptive digitizing the retail banks' sector is been analysed. In addition, globally wide digitization of e-commerce by financial organisation differ and at different geographical locations to provide competitive advantages for their sectors, they operate. The decision organisations took to look for new market value and moving to digital territory is with the pursuant of new customers and join the emerging business forces for the digitization of communities. This decision of the organisation to practicalized the theory of Disruptive innovations technologies into the perspective of advantage in the financial sector.

The financial and banking sector is the sector that generates lots of data, since the dawn of information technologies with power processing of information became easy and the sector became more empowered to transform and enabled to introduce technology services and products, such as electronic transfer, electronic cash cards, automated teller machines (ATM). However, information technology (IT) was the first innovation implemented in the banking sector due to lots of data generated by banks. IT contribution to bank production was to facilitate efficiencies at the back-office of the bank. Gradually the IT usage continues to change the way banks serve their customers by introducing more automated front-office developments. These IT developments were banks' attempt to find other means of distribution channels to serve their customers conveniently, which lead to the introduction of a money-dispensing machine (ATM) and the convenient usage of a credit card (Liao, et al., 1999).

The earlier 1950's innovation in the bank sector is an introduction of banking card by BankAmericard, which was a payment card. The America Bank decided to expand to other geolocations to have more customers use the card by changing the operating model, thus accommodating the other geolocation customers due to the restrictions of boundaries operations licenses ( Deloitte development LLC, 2014). Moreover, it made possible the extensive utilization of ATMs for the dispensing of funds and cross border transactions. ATMs brought significant positive relief to the customers as they do not to be at the bank offices to withdraw cash and convenient by opening 24 hours a day and works 7 days a week (Shariq, 2012).

The implications of the bank to adapt or change the operational model is the idea of expanding the competitiveness in the market. Organisations' leaders change perspective to look outside-the-box for competition that includes geolocation, customers, potential entrants, suppliers and other organisation that provide substitutive products and services.

Arshed, McFarlane and Maclntosh (2016) affirm Porter's view that competition drives fear in organisations for losing customers to its rivals, and the price competitions become a fundamental instrument to keep customers happy to stay. This way, organisations will embark on a journey of innovation and research to find ways and models to outperform their competition by introducing new distribution methods that help in lowering prices for customers. This method of lowering prices benefits the organisation by differentiating its self from other rivals, (Arshed, et al., 2016).

The above banks' digitization process is network connectivity dependent for customers to access the products and services and their accounts. This describes the mobility platform customers can utilize with their mobile devices. It means that there are multiple tangible entry-points a customer can have to interact with the bank services such as ATM, digital cards, telephone banking app, internet banking and cell-phone banking (Yannis Bakos & Treacy, 1986). The ATM and the e-Banking network connectivity became a dominant factor in the distribution channels and geolocations of the services (Shariq, 2012).

The important question to ask is "Are these activities described above disruptive technologies or are they innovation platforms that enable banks to have a different distributive channel to offer their customers the same products and services?"

### 2.8.1 The case study of Nordea bank

The Nordea bank was established by a combination of several Scandinavians countries, including Finland, Sweden and Denmark in the 2000s. By the sunset of 2004, Nordea had acquired 4.1 million active customers using the e-banking platform and 45 % of the Scandinavians population already had active accounts with the bank (Enders, et al., 2006, pp. 67-77).

According to Bo Harald, head IT in Nordea, the bank introduced e-banking in 1984; succeeding with its introduction, the bank continues to introduce more platforms of the kind to customers, such as Internet banking, TV-Banking, Digital TV, GPRS phones, and Wireless Application Protocol (WAP) enabled in mobile phones. It means that the introduction of the new above channels (platforms) results in the bank experiencing an increase in the usage of the new platforms by customers. It comes to show that the platforms were enabled by the internet accessibility to the bank (Enders, et al., 2006, pp. 71-72). This internet access has shown that the platforms above created by the bank internally are proprietary to the back end of the bank.

Nordea bank wanted to attract and speed up the uptake of e-banking usage in the Scandinavian society, and played a card on the banking table by introducing price schemes, which successfully attracted more customers. The price schemes offered the incentives for customers switching from manual to digital channels (Enders, et al., 2006, p. 72). The process of acquiring more customers had to do with the internal staff of the bank being re-skilled to market and train the customers that do not have computer or internet inclination in using the facilities of e-banking.

Moving from the physical paper usage to the electronic papers, the bank had to deal with the modification of the business model challenges, the conventional and the digital. The decision of the bank to adopt a model that embraces conventional banking along with e-banking was to resolve the challenges that were brought by the two methods of offering the same products and services to the customers (Enders, et al., 2006, p. 72). The bank growth in usage of the e-banking had a spin-off for the bank branches been reduced to a small number.

The observed services and products offered by the e-bank channel are not different from the traditional retail bank channel. It was just the merger of the two different value networks to have an integrated value-network that continues to serve customers with the same transaction banking, brokerage banking, savings banking and other products and services (Enders, et al., 2006, p. 75). It means that the integrated value-network is just the innovation of sustaining the services and products; the only difference is the speed and the distribution channel that made it efficient for customers.

The Nordea bank innovation beyond the retail e-bank operational norms are as follows:

- **E-business** to differentiate the bank with other banks that are offering the e-banking services. The flagships of the e-Business are
- **1**. **E-Identification**, which allow all customers of the bank to access governmental agencies and other stakeholders that have an agreement with the bank.
- **2**. **e-Signature** for participating stakeholders in offering services like insurance contracts.
- **3**. The **e-Billing services** and **e-Payment function**, where organisations that provide services can send electronic invoices to customers through the bank securely and the bank passes the invoice through to customers that have e-banking. Customers without

e-banking cause the bank to become intermediators by printing the invoices and sending it through post services to the customers.

- **4**. E-Salary function, the organisations that have signed an e-business agreement can send salary advice to the e-bank of their employees that have accounts with the bank (Enders, et al., 2006, pp. 72-74).

The observation is that the bank played a role of an intermediator by providing the services noted above to other corporate organisations, public and private customers. It could have been the novel strategic idea that worked efficiently for the Nordea bank. The intermediator bank services are disruptive and innovative on back-end proprietary technologies attributed to the accessibility of internet connectivity. The key to customer's satisfaction is that the reputation of the bank as known as an innovative bank, it builds comfort for its e-bank customers.

### 2.8.2 The Security First Network Bank (USA)

The Security First Network Bank (SFNB) has introduced its customers to internet banking without stepping into branches. The bank has targeted the majority of customers that are geolocation isolated from the main centres of activities in America. The bank is covering the 100,000 square miles in South Dakota and Nebraska remote areas in America (Digital Check, 2017).

The SFNB introduced thin-client-network platform that managed the inclusion of the rural areas that were isolated to the conventional banking and geolocations establishment. The technology front that introduced to the bank is the following: (Digital Check, 2017)

1. Utilizing Horizon teller, from FIS Global organisation
2. XenApp, and
3. Xen desktop from Citrix organisation
4. SecureLink from Digital Check is a hardware wireless device with Ethernet network capability and works like a mini-computer to process all scanned checks and id copies real-time.
5. TS500 check scanner from Digital check
6. Teller Transaction Printer (TTP)
7. Mobile Banking that is known as Badlands Express which has similar fixtures with the core bank

8. 4G mobile hotspots with the cellular carriers to have a mobile application capability to transact.

The SFNB positive outcomes from migrating away from conventional banking to a technology connected network services were very much critical to the success of digitising the bank. Several positives brought were, the SecureLink is self-sufficient with its own drivers and software capabilities that were compatible with the workstations. Moreover, the speed of processing of the scanned documents was improved and within its capacity: (Digital Check, 2017).

SFNB approach was introducing the hybrid model, which proved success of digitizing the banking process of offering services and products to the customers. Moreover, the inclusion of the marginalized communities lacking the banking infrastructure for their banking needs. It proves that the literature that has been published is more focused on IT technologies. It has been moving from the back-end as support towards the front-end, meaning that the SFNB bank has not introduced new technologies but used the existing technologies to improve the back-end support and also the services it provides to its customers and managed to recruit more customers that were not served properly with bank services. The bank managed to improve the activity process by automating technology innovation, and the distribution process: (Digital Check, 2017).

The observation that is noted of SFNB bank is that the bank has not changed its key operating model but capacitated the back-end support systems to efficiently capture and work with date in the bank. There was no evidence of a new service or product introduction by the bank except migrating to digital services.

### 2.8.3 The banking in Hong Kong

Hong Kong is a fertile ground for the banking industry and the country regulations are friendlier to banking services (Liao, et al., 1999). According to the report, Hong Kong has issued banking licenses amounting to 184 for grabs in June 1996 that includes the domestic licenses and international banking license (Liao, et al., 1999). From the experts' view, abolishing the stringent regulations and opening up the banking sector by issuing licenses enable the sector to do the automation and cost competition controls in the sector (Shariq, 2012).

In Hong Kong, the terminology used for e-banking is virtual banking; the words are both internationally recognised by experts, as the above definition was not yet adopted formally by the leading academics and expertise (Liao, et al., 1999, p. 64). There are four types of virtual banking in Hong Kong namely ATM, Phone Banking, Home Banking, and Internet Banking (Liao, et al., 1999).

The automated teller machine in Hong Kong has a footnote that is critical for the transacting life cycle. Telephone banking in Hong Kong still holds relevance and continues to play a critical role in the retail bank system. Home Banking in Hong Kong is operated by proprietary software developed by individual banks and the target market is the corporation's executives. One of the banks in particular, Citibank, has free services for home banking customers. Internet banking services in Hong Kong do not use proprietary software; it relies on the internet access plug and play. The virtual e-banking in Hong Kong is not mature like in other geolocations where their e-banking is advanced similar like Scandinavians countries (Liao, et al., 1999)**.**

### 2.8.4 The FinTech financial sector.

The driving force behind the financial sector shake-up in e-banking payments from Financial Technology organisations (FinTech) is the internet technology and mobile communication system that has been offered as service towards the majority of cell-phone and mobile gadget users in the world (Arner, et al., 2015) (Arner, et al., 2015). The exchange of services and goods facilitated the development of payments systems that are not traditionally tangible and cash-driven.

The Fintech industry has created a shockwave within the banking sector; it dictated how technology diffusion happening in the financial sector currently there are few areas that are still holding on the chequebook. The current generation (millennials) does not know how the chequebook looks like, also if they are lucky by attending historical museums, they can observe paper money and coins of years bygone how existing (Subbarao, 2017).

The incompetence of silo function of banks and legacy systems that continually fail to catch up with the IT industry progress in technology development, prompted the leapfrogging of FinTech organisations to introduce more drastic changes in the financial sector. With the legacy systems, the model of silo operations and secrecy of silo wining models, the technology advances were only inward-directed and conventional management style of silo success (Batiz-Lazo & Wood, 2002).

The nature of retail banks and the way their models are structured and the type of innovation models they continuously follow are a form of a routine incremental innovation for internal purposes of dealing with the data traffic the bank generates. However, research has shown that influence by banking management only generated during the profit intentions for competing with other banks (Batiz-Lazo & Wood, 2002). This means that management of banks does not asset their influence in adopting technologies that may change the way competition is generated by the sector.

External to the banking sector is a number of organisations that brought technology to the very deep spine of the banking sector. The introduction of telecommunications network firms, the Trans-Atlantic cables and the sponsored programmes by governments were influential in the geographical markets (Batiz-Lazo & Wood, 2002). With this early introduction of telecommunication systems to the bank implies that the banking sector already became digitized in the earliest years.

Governments will sponsor projects in telecommunications and technology growth in developing computational computers with the aim of dealing with volumes of data generated industry-wide. With everything considered, government research projects, Xerox, IBM, Univa and Unisys introduce software applications in markets due to power of accounting machines that were developed (Batiz-Lazo & Wood, 2002, p. 195).

When technologies brought convergence, a number of technological items brought in one product and the dynamic unpacking of Information Communication Technologies. The knowledge space explored technologies that convergence brought into products and the development of solving today life challenges and to make them easy (Mangi & Mwakio, 2018). This means that the leapfrogging of computers to become mobile devices and handheld gadgets has made it possible to shape knowledge of solving the challenges as tools of today.

The Fintech industry is enduringly responding to the challenges that are market-driven and customer demands driven (Govindarajan, et al., 2011). The technology trends have different impacts on the way models of organisations are structured and responds to competition in a particular market. The advent of cell-phone and the social media activities on the mobile items has open convergence to the realisation of technology engagement on the service market. The mobile consumer market has advanced the exploitation branchless banking in the service market by influencing home banking without going to the branch (Tinnila, 2012). Furthermore, it became a litmus test for retail markets to avail goods and services online for customers to have purchase-power and the challenges of payment methods thereof (Tinnila, 2012).

Following the development of distribution channels that brought by the technology absorption through to the consumers, there is an observation in literature, about African continent context of cell-phone penetration and the exploitation and diffusion by the Fintech Industry. Whereby the cell-phone applications play a pivotal role in the payment of goods and service without customers physically walking into the bank or store. E.g. M-PESA, WeChat, PingAn, Go-Jek and Alipay, etc... The WeChat application started as a messenger app and gained further functionalities that include banking, online shopping, healthcare, etc. (DBS group research, 2019).

### 2.8.5 The e-banking in Kenya banking sector.

The Electronic Funds Transfer (EFT) is the novel find in the Kenyans financial sector, where individuals can transfer money from their cell phone to the recipient cell-phone account and the transaction is completed by crediting the recipient for the money. The latter was possible by the cell phone systems that can cover vast an even stay connected for a long period. The year 2007 became the year Kenya made head-wave by formalizing the electronic transfer of services through the leading Safaricom platform. They called M-PESA.

The electronic media of short message services (SMS) was handling the services like deposit, send cash, and withdraw funds that included the small business that sells goods and other services. It is reported that the culmination of 2009 M-PESA has penetrated the Kenyans' financial market by 65 per cent (Jack & Suri, 2011). This means penetration of cell-phone usage is at the fastest growth in the Kenyans' business market.

According to Heyer and Mas (2009) and FINMARK TRUST (2007), M-PESA is globally known mobile payment platform in the context of the African countries and similar model of mobile payments was introduced in several other countries like the Philippines called Smart

Money (Globe) and Afghanistan. This mobile money it uses technologies that overcome the difficulty of entering the payment market that historically dominated by mortar and brick banks and merchants the way were configured, that is a disruption innovation in the payment sector by mobile money. (BILL and Melinda Gates Foundation: Heyer, A; Mas, I, 2009). This means that the developing economies are the ones revolutionizing the innovations in the financial technology sector. These innovations are very rife particular in Africa where infrastructure like a bank branch is a luxury in the poor communities but cell phone usage is very much adopted with easy and everywhere.

With the literature in the field of mobile finances, there is no direct definition of mobile finances. Therefore, there are several definitions, which still need to be collated and come up with one universal definition to agree upon from the academics and professionals. For the consensus to the definition should be drawn from different field models, the bank model, telecommunication model, FinTech model and independent banking model (Makore, 2014). The experts have slowly generated the studies of technology innovations in banking, however, despite IT influence in banking there has been literature on the rise but not rigorously published and very little literature on the mobile banking has been published (Liao, et al., 1999).

Since the start of IT, there has been a back-office support system and it has gradually moved to the front office as the automated services. The automation of IT into products, apps and services causes critical competitive approaches to the bank effectiveness to provide convenient services and cost-effective products. The automated innovation attributed to the disruptive innovation distribution channel nature of mobile money (BILL and Melinda Gates Foundation: Heyer, A; Mas, I, 2009). The mobile usage for transacting in Kenya has enabled growth and coverage usage of the e-banking sector.

In summary, technology has enabled non-banking organisations known as the Fintech sector, to find gaps and participate in the banking sector, by offering some level of services like payments services, issuing of credit cards and other transacting services. The Fintech is not directly part of the bank operations process but partners that created platforms for banks in the financial sector to attain new customers and provide a value proposition. From the main topic of disruptive technologies, there is some level of disruption to the banking process. Banks' activities that are directly influenced by disruptive innovation have a partnership with an external organisation that assists in innovations and enables to improve the geolocations' market competition with other banks. What was found is that IT is internal-driven innovation for process and back-end of the bank, while ICT convergences enable new models of the distribution of service.

# 3 THE MICRO-LENDING MARKET AND CAPITEC BANK

The following section describes the context of the micro-lending market that forms part of the less-regulated end of the banking spectrum in South Africa. The informal end of the banking spectrum is the domain of small mutual banks that services the bottom of the client pyramid, whilst the formal end of the spectrum was dominated by the four big retail banks. The section provides the historical context for Capitec Bank's transformation from a player in the informal sector to a mainstream retail bank in the established banking landscape.

## 3.1 Definition of micro-lending

According to free-dictionary on the internet, micro-lending is a process taken by Non-Governmental organization (NGO) or financial commercial organization to lend money to any poor person or small enterprise for his or her own personal use. The terms of returning, the money is negotiated with high interest (Freedictionary, 2012).

**Figure 3.1**: The picture of Capitec Bank head office in Cape Town


**Source:** Capitec banking holding (SAFINDIT, n.d.)

The micro-lending business in South Africa has a tremendous rich history, it has (micro-lending) evolved and continues to evolve (transformed) since the early 1980’s. In early 1980, the finance sector saw a number of new small financial institutions enter the business of microfinance, a mixture of commercial and non-commercial organisations. During the 80’s urbanization was growing and the migration of the labour force was gaining momentum presenting positive economic interest. The majority of the black labour force was excluded from the formal banking sector by the apartheid system (Porteous, 2003). This resulted in the financial sector at the lower-end (bottom of the pyramid) facing the challenge of poor services and unregulated interest rates. **Table 3.1** below shows the exclusions from banking service from SADC countries financial sector.

**Table 3.1:** Unbanked and excluded population in SADC

| Country | Banked % | Non-Banked Formal % | Informal Only % | Financially Excluded % |
|---|---|---|---|---|
| South Africa | 67 | 6 | 8 | 19 |
| Namibia | 62 | 3 | 4 | 31 |
| Swaziland | 44 | 6 | 13 | 37 |
| Botswana | 41 | 18 | 8 | 33 |
| Lesotho | 38 | 23 | 20 | 19 |
| Zimbabwe | 24 | 14 | 22 | 40 |

**Source**: adopted from microfinance review, 2013 (Bank SETA; University of Pretoria, 2013).

The is a huge percentage of the banked population in South Africa, they are either active account users or are account holders that do not use their account for some reason. However, if that is how the banked population is reviewed, then it is believed that the Financial Excluded percentage will change drastically. From Christensen's point of view on the principle of "markets that don't exist can't be analysed", the informal market on the table might be incorrect. That could mean that micro-lending in South African was a market without data and therefore was not analysed. The only instrument in the market was an old regulation, the Usury Act and the Mutual Bank Act, until the intervention of government in new democracy (Economist, 2002); (Schoombee, 2004).

Through the years some micro-lending organisations showed interest in serving the underserved for different reasons, there were some organisations who came in as early as 1978 such as Credit Indemnity. They were Non-governmental organisations like Get Ahead Foundation, Group Credit Company and Small Enterprise Foundation. Commercial organisations like Louhen Financial Services introduced the card-and pin franchise, whilst King Finance pioneered commercial payroll deductions, in addition, new organisations entered the sector due to the international attention that was put to practice by Grameen Bank in Bangladesh.

It changed some perceptions on micro-lending and elevating poverty in communities, which are excluded from the formal banking sector. Organisations entered the market because they were given a sense of market opportunity to service this underserved population, with profit to make in the process. For example, get Ahead lenders (Grameen Research, Inc, 1976).

The informal market in South Africa experienced an abundance of entry level cash lenders, who brought with them challenges that were concerning to the outcry of population. Such an example is the challenge of keeping identity documents of clients.

Communities were concerned that micro-lenders would notoriously introduce stringent rules for lending money towards clients (Kirsten, 2006); (Porteous, 2003). Which are making it difficult for customers to access financial services. Some of the notorious criteria that introduced is presentation of Identity Documents with the intention to keep it in the bank, a payslip in getting access to be served and high interest rates.

However, looking at the reality of South African firms and organisations in relation to the working population that are underserved. The farming community did not provide payslips; also, some organisations did not have formal paying methods where payslips were printed. For not having, a payslip generated by employers from different sectors it means that the majority of the population will continue been excluded from financial services. Lenders' methods of offering loans and small financial services were heavily dependent on a person presenting a payslip and ID. If unable to provide documentation there would be no services, e.g. farm worker, factories workers, domestic workers (people who clean other people houses and gardens) (Schoombee, 2004).

The Government started to resolve these challenges faced by the informal sector by regulating the micro-lending business sector by introducing the Usury Act, the Mutual Bank Act, the Village Banks (Co-Operative financial services) and the Micro Finance Regulatory Council (MFRC) in the earlier years (Porteous, 2003) and (Kirsten, 2006).

Organisations like Baobab Solid Growth Ltd (changed to Theta) was one of the largest in the micro-lending sector and was one of the success stories of listing in the stock market. It by opening its books and they reflected huge return and it showed other organisations that the lending business has a potential of growth and could be profitable in the sector (SARPN, ANC, 2005); (Economist, 2002).

Professor du Plessis quoted a formal finding from his researcher, in his analysis of the micro-lending sector about how many organizations operate in sector and he found the results enlightening in 1997. From his research he found that were three thousand five hundred (3500) formal micro-lenders (Du Plessis, 1998) which were making a turnover of R10.1billion from R3.6 billion when compared with the previous period. It show that the growth of micro lenders jumped to 192% increases in three (3) years period from 1995 to 1997 (Du Plessis, 1998) (Schoombee, 2004); (Mohane, et al., 2002).

The history of the micro-lending market has also been instrumental in introducing the use of technology advancement to their advantage to help in fee collection efficiency. There were two visible technology methodologies introduced, Card-and-Pin and Salary Deduction. This was intended to change the way monthly payment by clients were collected and to simplify the issuing of loan funds to clients (Paradigmshift, n.d.); (James, 2014); (Du Plessis, 1998).

The was no longer a need for customers to carry cash out of the cash loan banks, people were given cards with pins after being granted loans. It meant that more and more people ended up having debit cards for banks and bank accounts. The employer organisations had agreed with the banker to use the salary deduction collection method, which meant bank, would have access to collect funds directly from the employee’s salary (Du Plessis, 1998).

The process was effective for collecting and issuing loans and funds electronically. The micro-lending sector showed the potential to bring innovative ways in the sector. The sector going through rapid change of doing innovation transformation and continues to strive by competing in the ever-changing financial sector.

However, the law caught up with the sector by introducing the Micro Financial Regulatory Council (MFRC) with the intention to regulate the sector properly, which outlawed some methodologies and process of collecting money that were introduced by the small financial institutions around the dawn of the 2000 period (Porteous, 2003); (Schoombee, 2004); (Mohane, et al., 2002). The informal financial sector continued to be monitored and regulated by introducing the National Credit Act of 2007, which introduced more conditions for the informal sector. The intention of the Act was to formalise the inclusion of the marginalized population to participate in the micro-lending sector. **Table 3.1** shows some findings on micro-lending.

The introduction of regulations did not help the situation of the poor regarding inclusivity in financial access. However, the economically active poor and hard-core poor continue to be excluded from financial services. Which means that there is continuous lack of financial services among the poor communities sector. Resulting in a continuous culture of little to no savings and a high number of loans with high interest rates.

Skowronski's (2007) research has found several challenges in the banking sector. He found that eight (8) critical challenges were holding back the micro-lending and banking sector from realising its full benefits and efficiency in banking services. They are as follows: (1) economic dualism; (2) informal competition; (3) Formal competition; (4) higher loan sizes; (5) Banking fees; (6) Cost of Regulations; (7) Entrepreneurial training; (8) Urbanisation and immigration (Skowrosnski, 2007).

- *Economic dualism:* South Africa has a very poor history of paying pay equity, the black were denied access to equal salaries. As a result, the poor depended on loans that came with high interest rates.
- *Informal competition*: The populations relied on the "stokvels", dodgy "mashonisas" and some micro-lenders to avoid the high interest rates. As result, most micro-lenders end up not generating enough revenue to sustain business.
- *Formal competition*: The formal economy received a well-structured banking system that offers multiple banking services that are well funded and insured. As a result, the micro-lending sector depended mostly on credit that has a high risk of zero returns.
- *Higher loan sizes*: There is a high demand for loans by lower earning borrowers. As result the micro-lenders cannot cope with the demand for loans, thus the higher loans size compares to counter parts from the formal economy.
- *Banking fees:* Micro-lenders have few loans and repayment fees are poor, low and usually fixed. As result, the formal sector will charge high banking fees and they make comparatively good returns on loan products.
- *Cost of regulation*: Compliance with regulation for the micro-landing is very costly, as it demands the best practices within the financial sectors and benchmarked compliances

with the financial sectors. As a result, the number of micro-lending organisations dropped and made competition tough amongst two sectors.

- *Limited entrepreneurial training*: Access for blacks to financial resources prohibited in South Africa, due to the laws of the country at that time. As a result, entrepreneurial knowledge was not allowed or explored so that it could be diffused amongst the poor population.
- *Urbanisation and immigration*: The South African context is that one has townships and rural areas that were isolated and deprived from financial services. As result, micro-lenders had a low demand from low earners as on weekends, most people commute (travel) from rural and townships to the urban areas for banking services.

The new organisation Capitec Bank, which is operating in the micro-lending space, did thorough studies in the sector and its targeted market. Upon analysing their findings and approaches, it seems they were answering Skowronski eight challenges before he made the finding in 2007. As Skowronski (2007) has explained in his research findings above, the bank was facing similar challenges that needed to address.

The micro-lending sector received a 'shake up' from one of its one micro-lender organisations that was formed by buying several other small micro-lenders, with the purpose of transforming them into a retail bank known as Capitec bank. As a new entrant in the financial market, it introduced new technology approaches with clear strategic motive and an intention to target the underserved. Their technology driven business model aimed at making the 'world flat' for South African lower income earns. By offering banking services and products to the informal employees, the formal employee and small market enterprise (SME) including the township Spaza shops. With the financial services and products that are transparent, easy- to-use and cheap.

**Table 3.2:** Summary of progress in micro lending history

| History of micro-lenders | 1968 | 1978-1990 | 1991-2000 | 2001- |
|---|---|---|---|---|
| **State Funded Organisation** | | Unknown although through NGO | Independent Development Trust(IDT)<br>National Housing Finance Corporation (NHFC)<br>Rural Housing Funds (RHLF)<br>Khula<br>Retail Financial Intermediary (RFI) | |
| **Law and Regulatory bodies** | Usury Act | Partial Usury Act | Usury Act Exemptions notices<br>Micro Finance Regulation Council<br>Stock Exchange Regulations<br>Mutual Bank Act | National Credit Act<br>Cooperative Bank Act<br>Financial Advisory and Intermediary Act<br>Micro-insurance framework.<br>South African Reserve Bank<br>NEDLAC<br>Financial Sector Charter |
| **Technology Innovations** | | Card-and-Pin system (debit card) | Payroll System Deduction (Persal)<br>E plan<br>E bank | |
| **Organisation in micro-lending Sector** | Credit Indemnity | Credit Indemnity<br>Get Ahead Foundation<br>Group Credit Company<br>Lauhen financial<br>ROSCA's (Stokvels) | Small Enterprise Financial<br>King Finance<br>Baobab Solid Growth(Theta)<br>ABSA Unifer<br>Nedcor people<br>Saambou<br>Provident South Africa<br>African Bank | Community Microfinance Network<br>Consumer Credit Association<br>Banking Council<br>Capitec Bank |

**Source:** Author's table inputs from (Porteous, 2003) and (Schoombee, 2004)

## 3.2 Banking Sector

According to the World Economic Forum Global Competitiveness Survey of 2013/14, the South African banking sector ranked third in its competitiveness behaviour among 148 countries in the survey. The South African banking sector is a vigorously regulated market (Kirsten, 2006) and (Matoti, 2014).

However, South Africa is a developing country with an unnatural past of political instability, and has two types of financial services providers. There is informal sector that services the low earning incomer's population with financial services; the other is formal that services the high salaried populations (Anderson, 2003) and (Kirsten, 2006). The informal sector not rigorously regulated; laws and monitoring were weak, due to the era of apartheid laws of exclusions on the majority of the population.

The other financial sector that is formal and has properly regulated banking services has few retail banking organisations in the market that service the middle and high end earning minority population, including the big corporation (Kirsten, 2006) and (G: Enesis, 2013) and (Orsmond, et al., 2013).

There are four (4) big retail banks that do offer services operation in the robust and regulated formal financial services market; they are as follows: Standard bank, Amalgamated Banks of South Africa (ABSA), Nedbank and First National Bank (FNB). The focus of this research excludes other private banks that are in the market but only servicing the highest end of market only (Anderson, 2003).

In 1994, the South Africa country ushered in a new dispensation of democracy, the time of economic transformation and a new political space, which brought new regulation, policy and standards changes. That meant a new landscape of financial opportunities; financial inclusiveness, new organisations and new socio-economic inclusions emerged in the junior democracy (Anderson, 2003) and (Kirsten, 2006).

## 3.3 Capitec Retail Bank

Capitec Bank pioneered in the province of the Western Cape wine land of Stellenbosch. It said that in the late 1990s an investment holding company PSG Group under the directorship of Chris Otto, sold their The Business Bank (TBB) micro-lending business to Capitec new owners (Capitec Bank Holdings Limited, 2011). According to Capitec records, the new owners inherited some of the micro-lending branches that were under the service of PSG group subsidiary TBB. This was to become a new platform for transformation by the aggregation of micro-lending business moving toward a single retail bank with the new identity, Capitec bank (Capitec Bank Holdings Limited, 2011).

**Figure 3.2:** Capitec Bank brand logo

CAPITEC
BANK

Simplicity is the ultimate sophistication

**Source**: Capitec Bank responses to article in business time (Capitec Bank, 2013)

The shape shifting of the business initiated a series of transformation processes and legitimizing the financial business, by 2001 South African Reserve Bank issued a retail-banking license. Then PSG subsidiary known as Keynes Rational was renamed Capitec Bank holding and The Business Bank (TBB) change its name to Capitec bank under the stewardship of Mr Riann Stassen (Capitec Bank Holdings Limited, 2011); (Pitman, 2011). In the South African context, there is a born free bank servicing the low-income earners and the township shops (Spaza's), is growing fast. It became the first micro-lender business to obtain a license to operate as a retail bank (Moody's Invester Services; Haladjian, M. ; Chrysaphynis, G., 2006).

The Financial Sector Charter became an enabler to the Capitec bank formation, which meant the beginning of the transformation of the banking landscape in South Africa. The big banks started to realize and notice the new player in the market and started to consider looking into the new market (NEDLAC, 2002) and (Kirsten, 2006).

During the pioneering stages, while it was under the name Keynes Rational, it was issuing unsecure credit loans to lower incomers. It was not only in the financial sector, but it was also doing other financial distribution business with a number of retail furniture stores. Under the same management at Keynes, a decision was taken to grow the business by acquiring more branches (Capitec Bank Holdings Limited, 2011) and (Pitman, 2011).

This acquisition of more branches meant that they did not have to build but rather buy small-established micro -lenders. It showed the intention of going big and their strategy of growing in the servicing of the unbanked. There were about 300 branches between 1999 and 2001 (Capitec Bank Holdings Limited, 2011), (Pitman, 2011) and (Haladjian, 2006)

During the acquisition of new branches, the operational responsibilities grew, the work force grew and the monthly book value grew significantly by 2001. The strategy was clear and directed a bottom up process due to their business model (Haladjian, 2006), (Capitec Bank Holdings Limited, 2011) and (Pitman, 2011).

In the year 2001, the Keynes Rational management took a strategic decision to consolidate its business. According to the management decisions that were made at that time, the company focused their model from the bottom to the top (Haladjian, 2006). This bottom-up model is meant to service the majority of the population at the bottom of the pyramid in Southern Africa. That did not exclude other business that were outside the country like Namibia and Botswana. For them (Keynes Rational) to implement and achieve the strategy, they had to acquire a banking license and raise enough capital to keep them meeting regulation obligations with the South African Reserve Bank (SARB) on start-up funding.

They prioritized the strategy in shaping up and changing the company and consolidated it into a new model of the bank Keynes Rational, which became a branch within the name The Business Bank Limited (TBB), in the same year. TBB was a subsidiary of PSG Investment Bank Holding Limited (Capitec Bank Holdings Limited, 2011).

It said that during the transformation process and the same financial year of 2001, a more deliberate and decisive decision taken by management to rename TBB to Capitec Bank Limited. The following financial year, saw Keynes Rational also renamed to Capitec Bank Holdings Limited and was listed on the Johannesburg Stock Exchange (JSE). The scope of the bank was directed to focus on giving retail banking services, the target market was the underserved and small business that are classified in the category of lower income and small profit enterprises (Falkena, et al., 2004).

The major aim for the retail banking service is access and inclusiveness, to be affordable and economical to small business. In addition, the model is to enable to take cash flow and perform calculative risk management. While in the same year, 2002, Capitec bank announced at the Johannesburg Stock Exchange (JSE) market, that the new brand Capitec had launched in South Africa. There were number methodologies for marketing the brand all over the main stream marketing platforms like television, newspapers and Radio including the internet (Capitec Bank Holdings Limited, 2011).
By the year 2003, Capitec bank performed its first transaction, which marked the beginning of affordable and transparent banking services for the poor. It was the introduction of the new service called the global one, which translated to one solution for all financial management.

The Capitec bank global one, manifested into a “silver bullet” for poor customers and small business for their personal and business banking needs at an affordable rate. One person could pay accounts, save money, have a personal loan and investment account, with the use of one card (global one) which they received from opening the account with the bank.

Capitec bank managers found retail opportunities to recruit more clients, by entering into bilateral, business agreements with retail stores like Pick'nPay, Checkers and Shoprite. The arrangement was that the retail stores would allow clients with Capitec bank cards to withdraw cash and can ask for their balances at cashier points of sale.

The strategic direction of the bank implemented gradually and the bank continues to introduce new products, like the multi-loan with different terms of payment. The branch’s acquisitions grew with time, by the end of 2005 there were roughly more than 290 branches added to the bank’s structural asset list.

In the following financial year, 2006, there were more services and products introduced, and they launched bank applications that could be downloaded to the customer’s laptops and mobile devices to use at their convenience. the bank launched its website for customers to learn and read about updates from the bank products line offers, it introduced remote mobile banking for clients to transact on their cell-phones and android tablets. While on the same strength of introducing services, the bank introduced the salary transfer and migration facilities, which enabled their clients to have their salaries deposited with the bank.

The bank continues to transform year in and year out by introducing new products and services to the existing product and service portfolios. In 2007, they launched internet banking for their clients. Customer were then able to transact in the comfort of their homes and perform any other business through the internet where tools like desktops and laptops (notebooks) would be commonly be used at offices. Subsequently they introduced a partner in form of a shareholder of a Black Economic Empowerment (BEE) consortium in same year it was made a compliance rule to have partner of the nature.

The bank aims continuously to improve their technology and adaptation rollouts. They improve and introduce fixed-terms and saving plans, adapting the technology of biometric verification of customer credit worthiness. Without the need for clients to provide much documentation or paper, work other than their Identity Document (ID) in 2008.

The mobile market continues to play a role in the banking sector. Around 2009, Capitec joined other banking sector players to introduce their own cell-phone banking application to their clients. It intended for all clients and with the knowledge that most South African have a mobile phone including those in the remote areas of the country.

Subsequently, 2010 became the moment of evaluation and feedback from different rating agencies and would in some way solidify Capitec in the banking sector. The data results came from the surveys brought about positive verdicts from Sunday time business, rating the bank best in the category of greatness and branding. Also, the international rating agency, credit Suisse, gave a rating allocation of top 27 brand in the banking sector.

In the same year, 2010, the bank clientele was more than 2.5 million; the infrastructure in the form of branches grew to more than 400 across the country. The brand marketing and the way it was presented to the consumers had a large impact as it drew away lower earning customers from the other four (4) traditional banks.

The following time line narrates and highlights the journey taken by the bank in the financial sector (Capitec Bank Holdings Limited, 2011):

1. Establishment of the Capitec brand in 2002.
2. The doors were open in 2003 for the first deposit.
3. The global one facility introduced as single solution in 2003.
4. Capitec empowerment share purchase scheme was established in 2003.
5. Staff complement increased to 1,402 with branches growing to 265 in 2004 with 194 of these branches becoming fully-fledged bank branches in the same year.
6. In 2004, it also launched a debit card partnered with MasterCard for the micro-chip.
7. Agreements with Pick and Pay, Shoprite and Checkers for clients to draw cash at tills in 2005.
8. Introduce multi loan products and term loans in 2005.
9. Capitec bank launches the website in 2006.
10. They introduce mobile banking services in 2006.
11. They introduce salary transfer facility in 2006.
12. Launch the internet banking in 2007.
13. Issue of 10 million shares to BEE consortium 2007.
14. The roll out biometric verification for clients in 2008.
15. Launched fixed term savings plan in 2008.
16. Launch cell phone banking updates in 2009.
17. The customer numbers exceed 2.5 million in 2010.
18. Branch numbers exceed 400 in 2010.
19. Credit Suisse accolade as one of 27 great brands of the future in 2010.
20. Become number one Sunday Times business Times Top 100 companies' survey for 2010.
21. Capitec rights issue in 2011.

### 3.3.1 Nature of the Business

The Capitec bank has introduced a new business model and strategy, the model is technologically driven, and mainly focused on low- and middle-income earners. It is a bottom -up strategic model, geared to provide services from bottom low earners and the middle-income earners in South Africa which also include the small enterprise business (SME) (Coetzee, 2003). It provides small unsecure loan services; it provides savings, transactions and mortgage credits. Its value proposition is geared to service customers with affordability prices, accessibility to infrastructure, personal experience services and simplicity of product services (Coetzee, 2003).

The bank aims to provide affordable prices to most of the ordinary customers and become transparent to what it offers as products. It simplifies its process by introducing the single card, called the global one, which are used for savings, credit and transacting. The bank also provides access to its internet platform for its customers to transact or transfer of money through mobile banking, internet banking, as well as through their retail partner's points of sale.

With its (Capitec) exploiting, transforming and diffusion of technology, it has created a number of distribution value networks that branch across South Africa. The principle of its branches is a personal touch of caring for its customers. As result, there is no glass barrier between customers and employees (Coetzee, 2003).

The bank assists in a personalized banking experience in such a way that employees help customers meet their banking goals. The branches address outdated processes, which is a strategy to position themselves. (Haladjian, 2006) It argued that Capitec bank has performed consultative research for the needs analysis of its target market. The outcome of the research gave the management of the bank the overview of their targeted customer concerns on the banking process.

The bank received some of the customer's concerns and questions, some of which were posed to the bank founders, as follows:

1. Do customers still fill in forms when they go to a bank today?
2. Cannot customers see what bank personnel have on their screen before them, it is not a secret?
3. Why Do banks have glass barriers between the employee and customers, it restricts services.
4. Are branch managers concealed in the back office, hidden from customers? They should be the custodians of customer relationships.
5. Must customers stand in queues just to be told that they have wrong information or wrong queue?

6. Do banks close at 3:30 PM in the afternoon?
7. Are they closed on Sundays?
8. Are bank fees structured in such a confusing way? (Capitec bank, 2014)

It argued that the bank has responded to some customer's questions and services they posed. The bank based its transformation model with a purpose focused on the concerns of customers; it responded in four pillars that carry a clear vision and mission of customer orientation. The bank introduced face-to-face transparency for customers to be hands-on in their banking transactions.

- **Accessibility**: introducing new operational hours and location of branches closer to the customers transport routes, stations and workplaces.
- **Affordability**: Services and products are cheap, low interest rates, low transacting fees and costs at ATMs, and low monthly fees as well as transparency.
- **Service (unique experience)**: regional customer based services using customers' home language.
- **Simplicity:** paperless, biometric and finger print process.

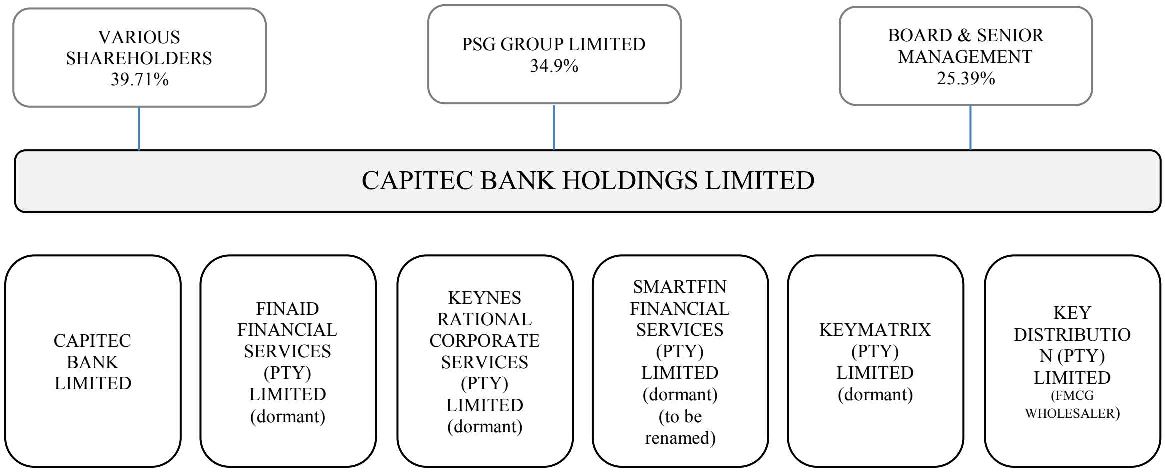
The bank strategically signed a memorandum going into business with three major retail chain stores, Shoprite, Checkers and Pick'n'Pay, taking cognizance that most of the retailors are on route servicing the same targeted customers (Coetzee, 2003). Capitec bank, through the management of personal relations, management of information systems, their human capital and product offering is been developed around these fundamental pillars mentioned above.

To accomplish their expected goals with their pillars, Capitec Bank said to focus on their human resources, which is a key area for success. They invested heavily into training their staff and into their information systems (Coetzee, 2003). The information systems investment aims to deal with the burden of administration, by allowing smooth increased efficiencies of opening accounts and performing electronic transactions that are cashless and paperless processes. These processes are beneficial to customers and the bank when doing business in areas that do not have access to facilities (Coetzee, 2003).

### 3.3.2 Structural model of Capitec Bank

The is several organization structures that build up and supportive structurally to the model that enabled the Capitec bank to exist and operate in the banking sector.

**Figure 3.3:** The structure and model of Capitec Bank




**Source:** Adopted from innovation approaches to delivering microfinance services 2003 (Coetzee, 2013) and (Capitec Bank limited, n.d.).

Capitec Bank is under the control of its listed holding company, Capitec Bank Holding. Its main operating focus is Capitec Bank. It provides savings, transactions and un-secure lending products to individuals and distribution business (Capitec Bank Holding Limited, 2011); (Coetzee, 2003); (Haladjian, 2006). In 2014, it reported that it had increased their number of branches to 629 and 2,918 automated teller machines (ATM's) and included the collaborations of other banks which lead to an extra 12000 ATMs to be accessed by customers (Coetzee, 2003).

There are four (4) subsidiaries in the Capitec Group that are dormant, which are Finaid Financial Services (Pty) Limited, Keynes Rational Corporate Services (Pty) Limited, SmartFin Financial Services (Pty) Limited and Keymatrix (Pty) Limited. These four subsidiaries were incorporated in Capitec Bank effective 1 March 2001 (Capitec Bank Holding Limited, 2011); (Coetzee, 2003) and (Haladjian, 2006).

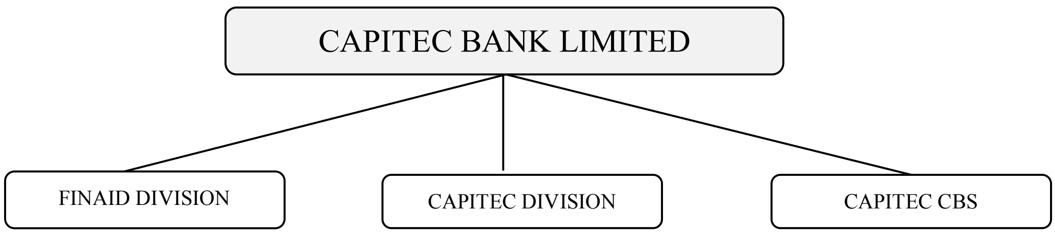
Capitec Bank holding had also piloted a consumer goods distribution known as Key Distributors (Pty) Limited ("Key"). Its focus was to provide very small business like 'Spaza'-shops with credit and goods supplies. Capitec had invested 75% in the distribution organization. It proved as a working model by proving assistance by contribution profit in Capitec business (Capitec Retail bank ;REUTERS, 2008).

The company subsidiaries conduct retail banking and wholesale distribution of consumer goods. The company operates in two segments: Banking and wholesale distributions. Banking incorporates retail-banking services, including savings, deposit, debit cards and consumer loans to individuals. Wholesale distribution consists of the wholesale distribution of fast moving consumer goods. Capitec's other subsidiaries include Keynes Rational Corporate Services Proprietary Limited, Dormant Capitec Properties Proprietary Limited and Keymatrix Proprietary Limited.

### 3.3.3 Capitec Division

It uses a model of walk-in customers to services for finance for structured income earning profiles and targeting higher earning categories. The division is the one that provides retail banking with a number of branches all over the country. The model for recruiting more customers was through the Employer and Trade Unions.

**Figure 3.4**: The Capitec bank division structure in 2015.




**Source:** Adopted from innovation approaches to delivering microfinance services 2003 (Coetzee, 2013).

#### 3.3.3.1 Finaid Division

Finaid focuses on providing short-term unsecure micro loans on a 30-day term, which varies according to individual risk, to approximately one million low earning customers. Customers whom would not qualify to obtain loans in the formal banking setup. To meet its loan obligations, it depends on its network of distribution branches. That leads Capitec to do away with Finaid branches and convert them into Capitec branches, currently Finaid no longer exists as division of the bank.

#### 3.3.3.2 Capitec CBS Division

Its purpose is to provide unsecure loans in the informal sector to commercial organisations in the category of SMMEs. In essence, Capitec bank limited currently has two divisions, the Capitec CBS Division and Capitec Division. They are the ones focused on creating value for customers over all regions and country at large (Coetzee, 2003).

### 3.3.4 Capitec Market and attributes

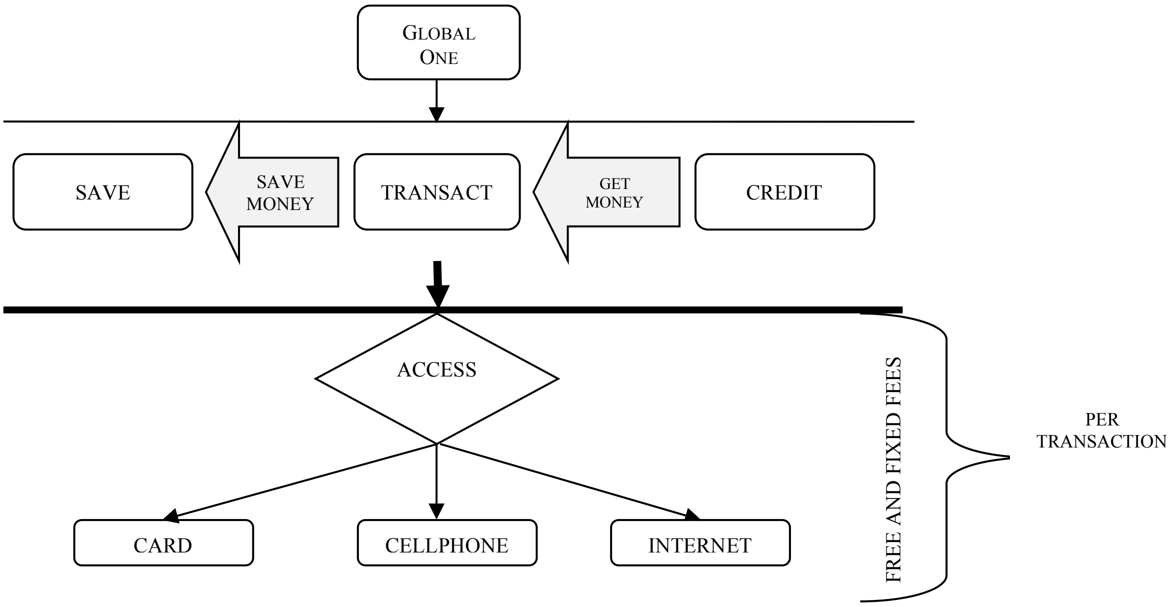
The needs of the majority of South Africa's working population and small business for banking services are unmet by the formal banking sector. Capitec Bank aims at closing the gap of unmet needs by providing services that are affordable, transparent and accessible.

A micro-lending operation of Capitec Bank focused on offering unsecure credit, risk that is within acceptable bounds of the laws of lending. This includes the small business enterprises. It also provides transactions on different multi-platforms, the internet, and cell phone banking and provide their own application. It accepts deposits in branches but not withdrawals – that can be done through the ATMs.

Its branches operational time is been extended beyond the usual periods, most commercial banks operate from 8 a.m. to closing at 3 p.m. but Capitec Bank operates from 8 a.m. to 5p.m. to allow commuting customers to find bank services.

Capitec Bank has collaborated with retail supermarket stores to help customers perform transactions at until points. In addition, Capitec collaborated with MasterCard to provide the global one card with a chip so that can be used domestically and internationally at affordable prices. The transaction process illustrated in **figure 3.5** below:

**Figure 3.5**: The global one money management model




**Source:** Author's own from Capitec global one leaflet (Capitecbank, n.d.)

The Capitec bank Global One money management card given to every customer no matter his or her financial background or status. It has the following transaction structure: Card purchases, cell phone and internet banking.

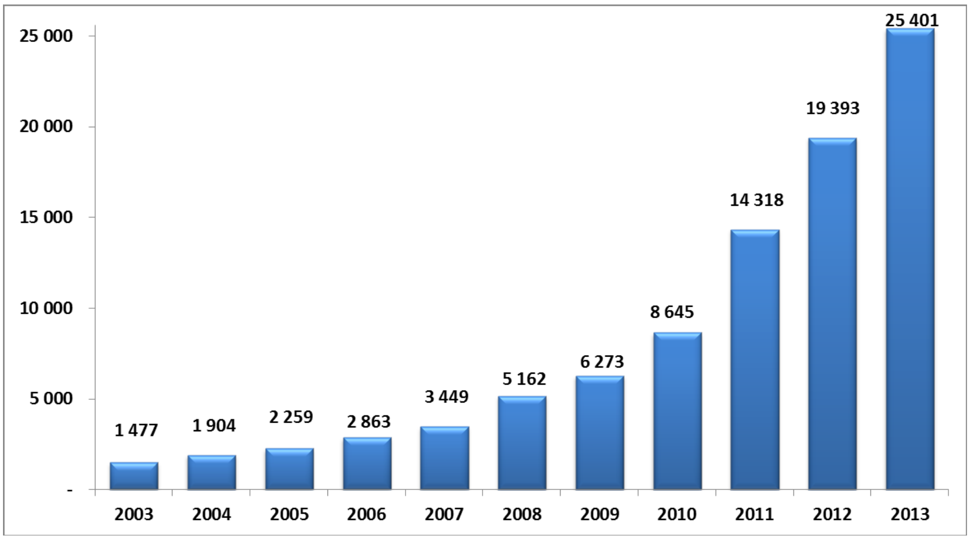
## 3.4 Financial Performances

The bank has been on the progress of transformation and growth for a couple of years. The growth attributed to a number of factors; one of them is the number of new customers that the bank receives every year. The bank has to consolidate and upgrade some branches to full banking services, not only ATMs, in specific areas. Capitec bank has a number of offerings of services in the bank and online (Kirsten, 2006).

The Capitec bank market defined in terms of living standards measurements (LSM), which is a tool that measures the wealth and geographic indicators of clients. The Bank core source of clientele are the employed community, which are men and women between 20-49 years with average salaries of R6 800 per month.

Capitec Bank offers unsecure loans from following process, minimum one (1) month - to a fixed term of thirty-six (36) - months. Capitec monthly was making increased transactions of servicing loans, in an around 2008 on average there were more than 260 000 loan transactions per month. Which has shown increased growth in previous years as **figure 3.6** below shows successful business transactional growth on loans and exponential growth, that is not slowing down (Capitec Bank, 2013).

**Figure 3.6:** Capitec Bank net loans and advances graph




**Source:** Capitec Bank responses to article in business time (Capitec Bank, 2013)

The bank argued that is unique, what is that it offers to its customer base is a product called the global one financial management. **Figure 3.5** above provides an indication of personal management. It has five savings accounts at 10% interest a year. The transacting facilities (debit orders/stop orders), internal bank transfers and retail debit card purchases. All these variables are incorporated in one facility for personal management. The bank charges the lowest fees on any transactions made locally even international transactions are relatively low (Capitec Bank, 2013).

Capitec Bank has plans to draw more individuals from other competitor banks, through a leveraging system roll out, that will see more new branches doing core banking operations such as issuing cards, accepting deposits, money and savings accounts lending are become more amplified and efficient. Capitec Bank is said to have shown an increase in the number of customers joining the bank in 2015 by 856 000, compared to 2014 of 711 000. A conducted survey in 2015 by AMPS reported that Capitec Bank's customer base has grown by 16.8% when compared to 2014 with reported growth of 12.7%. The total customer base is 6.2 million and growing. The bank has declared that it has a supporting system role for corporate organizations that need services for paying their employees. Capitec argues that they provide unique services that save money and time with transparency and simplicity to their individual customers, small business and corporates.

The key indicators from FY 2015, 2014 and 2013 it is summary of audited results **table 3.3** below: (Anchor Capital: Capitec Bank, 2014)

- Earnings and headline earnings per share up 26% to 2 209 cents
- Earnings and headline earnings up 26% to R2.5 billion
- Final dividend per share: 590 cents
- Return on equity: 25%
- Active clients: 6.2 million
- New jobs created: 1 191

**Table 3.3:** The financial year indicators for FY 2013, 2014, 2015

| | 2015 | 2014 | % Change | 2013 |
|---|---|---|---|---|
| FINANCIAL YEAR | 2014/2015 | | | |
| Earnings | | | | |
| Net Transaction fee income | R'm 2608 | 1927 | 35 | 1349 |
| Gross loan impairment expenses | R'm 4616 | 4410 | 5 | 2932 |
| Return to equity | R'm 3418 | 2918 | 17 | 2554 |
| Assets/Capital | R'm 53916 | 46191 | 17 | 29834 |
| Capital Adequacy health | % | 36 | 39 | 41 |

**Source:** Key indicators from FY 2015, 2014 and 2013 audited results (Anchor Capital: Capitec Bank, 2014)

The entrepreneurial initiative of management to serve the needs of the unmet population by providing financial services that are transparent and affordable compared to incumbent banks in the financial market. While observing the metrics above, it shows improvement year on year and the population of the targeted market are having believe in trusting the bank more as Bank show market growth. The metrics show that continuous growth from the improvement of quality offerings by the Bank and increasing the number of customers. This gives some indication that micro lending can be a market that is inclusive (Pitman, 2011).

The bank points out those loans over period of three months are handed over to the legal department for collections and they work according to their willingness taking up the risk. There were external challenges that were faced by the Bank and were beyond the bank's control, such as the downgrading of the country credit ratings by international monitoring agencies, however the bank followed through with regulations and compliant to banking conditions. The Bank was meeting the compliant level of base three liquidity ratios. The bank aims to continue to grow to 20% by 2020. If this goal is achieved it will translate to the best performance of a bank (Anchor Capital: Capitec Bank, 2014); (Capitec Bank Holdings Limited, 2011), (Anchor Capital: Capitec Bank, 2014).

## 3.5 Summary

Since Capitec bank has grown well over the years and so has its share base for its shareholders. It started humbling as the micro-lender business offering unsecure loans to individuals whose needs were unmet by incumbent organizations.

The Bank offers one unique product card known as global one. The global one product has number of services and provides access to individual product funds. The card gives access to the transacting facilities, credit approvals, internet banking transfers and stop and debit order services for the client holding the card. The unique global one financial management card in collaboration with Maestro card services provides free services for clients while performing debit card purchases, balance enquiries and banking statements. The bank through its distribution channel partners of retail stores, Checkers, Pick n Pay and Shoprite, provide its customers with access to low cost cash withdrawals at the points of sale of the retailers. Its model is based on simplicity, accessibility, affordability and unique experiences. They offer the cheapest monthly service costs in comparison to other incumbent banks. In addition, the bank card provides access through MasterCard VISA and SASWITCH to have full interbank connectivity throughout the world. The bank's operations in the micro-lending sector has attributed its growth to the bottom-top approach decided upon in their inception. From the **figure 3.6** and the **table 3.3,** it proves and shows the trajectory growth of the bank in the previous years and it seems that it is not slowing down yet.

In the following chapter, the innovations by the bank in serving the underserved populations or the targeted market will be unpacked more. It will be argued that those innovations disrupted the banking sector in South Africa.

# 4. INNOVATION AT CAPITEC BANK

Christensen argued that the phenomenon of disruptive innovation is heavily relied on management deriving a new business model for an organisation to introduce to the market as a solution for some unmet needs of customers. The innovated business model will be attempting to address a number of situational needs and include building nodal relations with the technology implementation of the business model. (Christensen, et al., 2009).

The situations in the Bank can be termed as items or drivers. The  Bank drivers meets and attend to the business model indicators has  been identified or picked-up to come up with the solutions for dealing with the following; 1. Low-cost innovative model, 2. Sophisticated technologies that make products and process simplified 3. Economically Value network that helps in marketing and selling products and services, not excluding the collaboration with other stakeholders and 4. Regulations and standards that are enabling external environment for the business model to achieve its goals or competition (Christensen, 1997).

In other words, organisations are coming up with the new business model that addresses a specifically attending to unmet needs of the societal environment. The needs might be specific market oriented. It argued that the targeted market is the population at the bottom of the pyramid without the means to afford the high-end products. This can be translated to be customers that are very much sensitive to prices of services or products and they are marginalised by incumbent organisations (Simanias & Milstein, 2012) and (Van Themaat, et al., 2013).

The business model also incorporates the use of the information communication technology (ICT) enabling environment, and the relationship (value network) kind of partnership that benefits both the Capitec and technological organisations. The bank to be compliant to financial banking regulations and follow set of standards and best practices that have potential to protect the business model and customers alike (Synthesis, n.d.).

Capitec Bank has explained that, their innovative model targeted the lower income population. Capitec banking model pioneered from the environmental research and analysis of the banking industry in South Africa. The bank's key finding was that there is a shortage and was a market gap of offering banking services to the lower-income earners in the population.

Doing things differently. The founding chief executive officer led the team leader of the management in the Bank for doing the research by the name of Mr Riaan Stassen. When he was interviewed, he responded “You can’t compete in banking industry as small-time player”, it meant that they have to go big and approach it different to the incumbent the way they are doing (Pitman, 2011). It means that the business model that was followed or introduces by Capitec bank as a retail bank to the new market, it needed to be a competitive and agile, do things different from the incumbent’s organisations in the same banking sector. The business model will be introducing new innovative process, innovative technologies, and innovative services for catering the bottom of the pyramid of the market (Van Themaat, et al., 2013).

The above drivers assisted the bank in enabling it to uplift the four pillars from the “disruptive technologies theory” by Christensen (1997) which are described and highlighted as the principles that are mentioned in Chapter 2. It is argued that the innovative business model by Capitec is focus on offering banking services that is affordable, simplicity, accessibility and personal services (Christensen, 1997). It is pointed out that Capitec bank four initiative of innovations it brought to the financial market with their new business model, they were intending to resolve the bottom of the pyramid challenges by in cooperating technology in the mix, are as follows:

## 4.1 Low cost innovative model (Affordability)

In any organization, business model is a key strategic component that plays a major role of the business. Moreover, business model is central to all areas of the business by partitioning the model in four components: profit formula, value proposition, resources and processes (Christensen, et al., 2009)**.**

### 4.1.1 Products innovation

According to Christensen business model argument, the very importance of coming up with profit formula that deriving profit from the product, how customers acquire products and service at price. The profit formula informs the organization on choices of producing the product in volumes and considering the cost of it, and how customers my pay for the product and services. The bank introduced Global One card (cf **figure 3.5** in Chapter 3). The Capitec

Bank Global One money management has the following transactions structure: Card purchases, cell phone, and internet banking retail store transaction including balance readers in retails stores. Internet based platform, debit card, mobile terminal banking offering transaction facilities without cash withdrawal function (Capitecbank, n.d.) See the **Appendix 1: The global one flyer.**

### 4.1.2 Value proposition

Christensen refer to value proposition as the customer receive value satisfaction from the product and services offered, the way a customer will derive value from the requested service and by buying the product. In essence, Capitec gives value to its customers by providing the following offerings:

1. Paperless services,
2. Increased operation hours from 7:30 till 5:30,
3. Global one card for every transaction,
4. Customer can withdrawal money at retail store counter and check balance,
5. Queue management for customers to have ticket and can go attend other matters outside the bank and come back find the spot still reserved. There are no more lines,
6. Infrastructure position at transit roads, opening of ATM at and small branches at taxi ranks, near or very close to work places,
7. The retail store Capitec card reader installed, for clients to have convenient access to balances on their bank accounts and withdrawals and will stimulate overall card usage at retails,
8. The customers who have their salary transferred into an account with the bank, they qualify for a twelve-month loan with the bank.

The **resources** refer to tools that are needed to be employed to enable delivery of service and products. This resources or tools they are enabling part for value proposition to be successful. As Christensen and Porter prescribe that, the resources are Humans resource, ICT, tangible, intangible assets and infrastructure (Porte, 1985). These resources do add value to the operations workflow, which is mostly supported by Porter’s value chain process. They (resources) enable connection through IT network process, operations flow within the bank and retailors to offer value-added towards customers (Michail, 2011) and (Capitecbank, n.d.)

## 4.2 Sophisticated technology that is simplified ICT led-process (Simplicity)

"Technology is an enormous enabler. When anyone of us turns on a mobile we all connect to the same infrastructure no matter how rich you are" *Robert Annibale* (Cooper, 2014)

**Table 4.1:** Technological innovation strategies of Capitec Bank

| FUNDAMENTAL TECHNOLOGY | KEY RESPONSIBILITY |
|---|---|
| Biometrics | |
| Scala platform and Qmatic | Content and Queue management system |
| Synthesis and tXstream | Compliances and risk |
| Value network (Capitec Bank Card reader) | Incentive for retail stores owners; promote the use of non-cash transaction, transaction at point of sale point of sale merchant plan. |
| Internet-based platform | On line banking facility |
| POCIT solution | Mobile banking terminal |
| Debit card | Visa and master card |
| ATM cash recycle | Dispense coins and notes |

**Source:** Author's table

It is believed that Capitec bank is a technology-driven model kind of business. The bank has a back-end and front-end information technology infrastructure that is driving paperless and cashless branches. The following technology implementation makes it passable for the Capitec bank to offer services towards its target market, even at the remote areas that do not have sufficient infrastructures:

### 4.2.1 Scalar platform solution

Is a content management, the platform was chosen particularly for its powerful controls for organising, distributing and updating content, and is able to support smooth transection modes displaying wait-time information and marketing presentations for the bank. The system enables the bank to display the content of the last six numbers called for service to be attended by the consultants. This way it helps customers to know the likely waiting time. Based on the ticket issued for the customer request, the system displays adverts according to the customer's ticket request on the monitor while they are waiting to be called to be helped.

The system benefits the bank and the customer as follow:

- solves issues before they influence the wider client experience,
- helps to ensure that the banks customers enjoy a more controlled and fair service experience,

- a content management that maximises value towards customers,
- provides flexible functionality to the bank employees, and
- Keeps customers informed and up to date with relevant information.

The system is a multi-vendor platform that accommodates any environment and is capable of migration. The platform can be used in any computer language and is flexible to adapt to innovations for future change. The platform is very much independent and can be deployed to operate on MVS, UNIX and the latest .NET 2003 Servers, giving a greater variety of choices (Scala, 2013).

### 4.2.2 Qmac system

There is an alignment between the Scala system and the Qmac system; the two systems help each other to be very effective. The Qmac system provides data to the Scala system when it issues the customer visit the branch and get to be issued a ticket of specific request. This means that when a customer enters the bank, the first thing they need is to collect a ticket from the Qmac machine at the door, see **figure 4.1**, the machine has variable options of what services are offered by the consultant in addressing some needs (Scala, Ethink, 2013). The items in the machines describe the service transaction that are available: deposit, opening an account, loan application, buying of a product, which may prompt the need to see a consultant for the product the customer has chosen.

**Figure 4.1:** The Qmac system for queue management tickets


**Source:** from Capitec bank-scala 2013 (Scala, Ethink, 2013)

The existing customer, who holds a Capitec card, will be asked to swipe their Global One card through the card reader on the Qmatic kiosk. When customers are new, the service champion checks with the customer about all necessary needs and documentation that are necessary before issuing the ticket from the Qmatic Kiosk (Scala, Ethink, 2013). The Customer will proceed at waiting chairs; while customers are waiting for the tickets to be called for services, they can track where they are in the service process by looking at the display monitor. These monitors also display marketing information according to most tickets' choices of products.

This means that the Scala system has been fed with the information of customers by the Qmac system and it displays the information on a monitor in the waiting area. The Bank had linked the content of information to the requested services according to the customer's needs. This ensures that content information is relevant to customers' needs while waiting for the service for which they have entered the bank.

When the service is ready to be renderer, customer is called using the software terminal integrated into the staff member PCs; there is a clear audio and visual prompt. Audio visual prompts are also used so that it can be fully inclusive. Anyone with visual or audio impairments is fully included and is dealt with equally. The following are customer value add and the bank benefits:

- The Qmatic system enables customer relationship building in the bank employees
- It enables at-the-back process to prepare for the customer meeting with employee and reduces transaction time
- It ensures that the right customer gets called for the right service at just the right time
- It displays information on screens that is directed to the customers who have tickets
- It eliminates shouting of ticket numbers with speaker audio
- It adds value to the bank management decisions by collecting data that will be used in the internal planners and strategic process of the bank
- It centralizes information in the heart of the Bank to make empower branch managers' decisions by dealing with the data in a context of staffing and the kind of services customers frequently demand when coming in the branches
- It enables management information to assist in compliance by its staff for better services to customers
- It provides value add to customers by reducing waiting time in the bank branches.

- It helps in decision making when is during the time of peak or off hours to monitor the accessibility of the branch services
- It helps the brand to grow by providing value add to customers' perceptions about the branch services

The Capitec Bank uses Qmatic system data collected and manipulate it for useful information by managing its resources and have the right staff available when customers need them. "With the new system, our efficiency will improve between 20% and 25%, at least", Carl Fischer (Scala, Ethink, 2013).

#### 4.2.3 TCS BaNCS solution:

The technology platform implements the core banking solution by providing access to all facilities through the centralized platform. It enables the bank to create a paperless service, opening various accounts and savings transactions. A client can open a new account without completing a form and get to be issue with a debit card within minutes. The solution offers the following benefits to the bank:

- Scalable solution, it can accommodate the banks' customer growth at any given time
- It's a fully integrated solution with other backbone systems in the bank
- It provides lower operational costs due to third-party lesser agreements
- It supports continual technology evolution and the dynamic banking environment - platform independence as the solution can operate on MVS, UNIX and the latest .NET 2003 Servers giving a greater choice, truly multi-vendor environment, and allowing migration
- Powerful reporting and customer relationship management capability that allowed for better customer insight and targeted cross-selling and upselling
- Reliable solution - its modular design isolates each component of the application, allowing system upgrades and enhancements to occur with the core system remaining online. In a 'common node' environment, the software will continue to function even in the event of a processor, disk control or physical disk failure.
- This ensured Capitec Bank's availability of banking services 24x7
- Streamlined processes, boosting efficiency enabling the bank to focus on sales and service
- Centralized control and support contributing to reducing operational overhead expenses

- Increased user drive and responsiveness to change
- Enabled pricing competitiveness, for instance, internet-based salary transfers and payment processing at approximately one-fifth of the cost of competition

Back-office processing from a central facility, enabling a light physical footprint, thus helping the bank to pursue innovative branch placement opportunities such as in train stations, and main roads (TCS BaNCS, 2013).

### 4.2.4 tXstream system

Capitec bank, like any other bank, has to comply with the South African banking laws, the international banking best practices and standards the local monitoring bodies like Financial Service Board (FSB) and Reserve Bank of South Africa (SARB) etc. Accordingly, the bank was given the task to report any daily financial activities on exchanges of currencies by the South African Treasury. Capitec Bank found a solution to comply with the tedious process of reporting daily by approaching a third -party organisation, Synthesis Solution, which gave them an application known as tXstream system (Synthesis, 2015).

According to Coenie Louw, the Capitec bank IT manager, the tXstream solution system enabled the bank to automate all reporting process and renewal process. They no longer manually do submission for reporting and applications at SARB, and enable them timely compliance. It is also said that tXstream system is compliant with its FINSURV specifications and standards (Synthesis, 2015). The following are the benefits brought by tXtream system for the bank:

- Straight-through processing
- Keep up-to-date latest regulations changes
- Validations and alerts for users
- Takes care of complex re-submission process
- Deals with complexity of cancelling, waiting and resubmitting process reports

It is said that the tXstream system does all monthly reporting process automatically without human intervention and on behalf of the bank. In other banking organisations the reporting process is still done manually due to legacy system (Synthesis, 2015).

### 4.2.5 POCIT mobile solution

Mobile POCIT application is said to be compatible with any network mobile lines. The application can assist customers in sending and receiving money through the mobile phone from any bank, a consumer can make a payment to anyone retail with their personal cell phone. POCIT application is recommended by Capitec Bank for its customers. It provides the following benefits for the bank:

- Cheapest services
- Is fastest real time
- Secure and easy

According to Reynders, they expressed that POCIT application is cheap to download from app's store on mobile phone at cost of sixty cents (60c), also it costs less for payments or transfers money at thirty cents (30c) (P0Cit, n.d.). The customer that utilize POCIT application, only need a mobile phone and the sim-card connected to the service provider, it does not matter whether it is a smart phone or ordinary mobile phone.

It has said to take sixty seconds (60) to download the application on individual mobile phones. It takes the average fastest time to download the application POCIT system on the consumer mobile phone and takes a minute (1) for a consumer to make payment and money transfer.

Reynders continue to describe the application as the best ICT tool saying that money transfer is immediate if customers share a bank, and depended on the bank transfer rates. Furthermore, Reynders said that he trusts the security features of the application, which they depend on the customer access pin chosen independently (P0Cit, n.d.).

The view for the security of the application in mobile phone is supported by mobile service provider Vodacom, by saying mobile phone payments are safer than any other form of payment system, and they (Vodacom) continue to say no mobile phone in the world is recently to be known to have been hacked into (P0Cit, n.d.).

### 4.2.6 Online banking

The online Capitec banking application enables customers to independently configure their own products to their own liking. Capitec customers are allowed to create their own packages of features to attach to current accounts. It also enables customers to register their own beneficiary without going into the bank branches to consult, but done online.

The Capitec internet banking enables organisations to have easy process of salary payment into employees' accounts. In essence, it provides organisations with the platform to pay salaries directly to account of organisation's employees, and doing other business transactions payments.

Capitec bank has provided organisations with a pay-roll services, it benefits the organisation for outsourcing some form of payroll responsibilities with less cost to their operations. It provides simplified and easy account access, including funds transfer between accounts and to other financial institutions.

## 4.3 Economical coherent value networks (Personal Services)

This section focuses on the value networks that were the key drivers that made it possible for Capitec Bank as entrant to the retail banking sector to be competitive through strategic decisions involving collaboration and networking to service the bottom of the banking client pyramid.

### 4.3.1 Definition

Christensen & Raynor (2003) describes a value network as a collection of commercial organisations and channel partners that collaborate to help in responding to the needs of customers. The organisations that have a buy-in in organisation business models of value networks as series of activities, within and around an organisation, which creates a service or product for the market.

The term is also be used to describe several suppliers that work together in an interconnected system, from raw material or design to delivery of a final product or service (Johnson et al., 2008a). It means that the commercial organisation that the Capitec bank needed their help into providing and producing the following: to produce and provide products and services, organisation that market the services and completed products, organisation that will be responsible in servicing the bank application and networks.

There are primary activities like operations, logistics and sales, and support activities such as technology development and human resource management Porter (1985). Therefore, an organisation on value network holds an assumption that the customer wants and demands value when they buy products and services.

Capitec Bank, by carefully examining the essence of what its target market is looking for in a bank, has been able to pursue innovative branch location placement opportunities, introduction of mobile banking terminal vans and business-to-business services. In such a way, that Capitec was able to open branches where: major customers were commuting, the train stations, taxi, bus terminals, and near customer employment. In order to cater for customers in the rural and township, Capitec introduced mobile terminal vans.

The bank focused on the direct value proposition to the employer and the employee; it meant that it assisted employers to pay employee salaries. Internet-based salary transfer and core payment system. Introduction concept of retail-stores money withdraws and balance checking by customers from a till (sale) point. “Real-time delivery of products and services is fundamental,”; “Our entire bank approach has focused on easy, affordable, real-time and system-driven access” as stated by Fischer.

Creating value is about the collaboration between the customer and everyone who serves them. Capitec provides very attractive value services and has figured out how to perform those services quicker, better and, where appropriate, differently.

## 4.4 Regulations and standards that regulate change. (Accessibility)

Capitec bank, before it could become a retail bank, used to be in the environment that was not rigorously monitored and regulated the micro-lending sector. For it to obtain a license, it must satisfy numerous regulations and meet compliances. It had to comply with banking prescripts to operate in the retail financial sector. Capitec bank had to comply with a number of laws and regulatory bodies; **table 4.1** describes some of the local regulations:

**Table 4.2**: The local regulation bodies,

| LEGISLATION OR BODIES | FUNCTIONS |
|---|---|
| The Banks Act, 1990 | Protect the public by regulating and supervising the entities which take their deposits |
| South African Reserve Bank (the SARB) | South Africa's central bank is responsible for the regulation and supervision of the banking sector in South Africa, with the purpose of achieving a sound, efficient banking system in the interest of the depositors of banks and the economy as a whole |
| The National Credit Act, 2005 ('the NCA') | Legislation aimed at protecting certain types of consumers. The NCA regulates the granting of consumer credit and provides for advanced standards of consumer information. The NCA requires credit providers to register with the NCR |
| National Credit Regulator (the NCR) | The NCR oversees market regulation and supervision, including unsecured lending |
| The National Payment System Act, 1998 | Regulates the South African financial settlement system in line with international practice and systematic risk management procedures |
| The Payment Association of South Africa (PASA) | Facilitated the introduction of payment clearing house agreements and agreements pertaining to settlement, clearing and netting agreements, and rules to create certainty and reduce systemic and other risks in interbank settlement |
| Consumer Protection Act, 2008 | Regulates the relationship between suppliers and consumers in order to protect the rights of the consumers |
| Electronic Communications and Transactions Act, 2002 | Guarantees the validity of agreements concluded either partly or wholly by a data message |
| Prevention of Organised Crime Act, 1998 (POCA) | Deals with money laundering, racketeering and criminal and civil forfeiture, and sets out the substantive money laundering offences |
| Financial Intelligence Centre Act, 2001 (FICA) | FICA complements POCA and provides an administrative framework to combat money laundering |

**Source**: Author's table (South Africa Reserve Bank, n.d.) (International Monetary fund, 2008)

Capitec had to comply with all the laws related to business finances and personal finances. The process of compliance to the finance laws is very unyielding and robust. The bank is not focusing on administration of banking laws, but their primary focus is providing services for its customers. The bank management decided in outsourcing the responsibilities, but remaining accountable to the laws that bind the banking industry. They created partnership with other organisations that are best suited for administration of business. They opted for innovation systems that are automated for their compliance:

1. tXstream system for compiling reports and submission to SARB for compliance on regulations
2. Synthesis system is a daily reporting system which is fully automated and is updated by Synthesis every time SARB reporting requirements change
3. Synthesis IT3b Suite for the new monthly reporting requirement for SARS

According to Low, Capitec bank cannot risk having their license to provide banking services revoked. It means that their compliance must be the most efficient at all time and they need to constantly monitor the changes or new development in regulations. It is argued in the financial sector that the Usury Act, Credit Agreements Act and Usury Act Exemption Notice create a bias in the allocation of credit, against allocation of credit for Small Medium Enterprises finance. This bias is created both through the interest rate limitation in the Usury Act and Credit Agreements Act, which discourages high risk or high cost credit provision, and through the limitation on loan amount and terms in the Exemption Notice. Also, the review will address the concerns with over-indebted, possible increased credit losses and the administration challenges for customers and business; and will also deal with the notion of "reckless lending", as a concern from the government's part.

It is argued that a comprehensive review is needed for the Usury Act and Credit Agreements Act, to bring about a new financial law that will guide the allocation or calculation of credit. It will have the potential to replace these Acts with a consolidated 'National Consumer Credit Act'. This would be in line with the recommendations of the Financial Sector Programme Mission of the International Monetary Fund.

These kind of regulation changes will impact Capitec's as new comer in retail banking to keep up. The outsourced solution also allows the bank to keep up-to-date with the latest regulatory changes while focusing on its core activities.

# 5. DISCUSSION

This chapter will be presenting a detail of what are implication of the study are and the theoretical and managerial decisions. Additionally, discuss limitations and future research.

The thesis presented a framework for disruptive technologies also known as Innovation Dilemma in the management literature. The principle question in the disruptive theory is why organisations fail when they are faced with new technology change while others and new organisations thrive in the market (Christensen, 1997).

The economist, Joseph Schumpeter (1942), asserted that organisations with capabilities of creative disruptiveness are capable of competitiveness in the market. He argues that they look for creative ways to meet their customer's unmet needs with prices, services and products. He contributed immensely to the theory of economic innovations.

Organisations with disruptive entrepreneurial minds have an appetite to pursue market at the bottom of the pyramid (or low-end market), because they can remodel their business strategy and business model to accommodate lower cost margins made possible by innovations in processes and technology. The remodeled business model gives the new organisations all the penetrable advantages compared to the large organisations, as their business models are very rigid to change and as management still holds on to the notion of old management theories (maturity in the specific sector). Most organisations and management fail to change their business model because of their maturity in the industry they are operating in (B.Moore & L.Manring, 2009). Disruptive change is enabling in the sense that it induces reflection on the part of management concerning their ambitions and strategy for the future of the organisation that may lead to some new models or thinking.

Christensen argues that it is very difficult to change entrenched organisational culture from a winning formula to introduce the disruptive model. That is why theorists of culture emphasize, "Change is difficult". Practically speaking, what Christensen means, is that organisation management means that they spend valuable time, resources, and talents at growing sustainable innovation inside the organisation. This leads to the organisation's wittingly or unwittingly ignoring market signals and failing to adapt when times are suitable. The outcome is continuing to sustain the business model.

Christensen is challenging management, old theories of management and the way they do business in the 21st century where the business environment is a highly uncertain environment, including the way they are so accustomed to the old traditions of doing business. Organisations that follow the Christensen model try to retain flexibility and gather feedback from the data in the market and from their target market for things that are working and those that are not. Management of those organisations changes their approaches and they adapt at the blink of an eye to the new information gathered in the market.

The next section will be starting the discussion of management roles in an organisation to give some analysis or unpacking of how the organisation gets to meet its obligations and goals, as well as the overall direction of management in the organisation and how managers influence the performance of an organisation.

Christensen argues that organisations fail while they are under good management. Also, He continues to say that good managers lose their leadership authority in running organisations when they rely on market analysis that helps them justify allocating resources to meet more returns with applications of sustainable innovations (Christensen, 1997).

Managers are people in the organisation who are given the authority to make strategic decisions and implement those decisions to achieve the goals of an organisation set for itself. There are different types of managers in one organisation that are meant to have responsibilities of people and also tangible and nontangible assets that are meant for an organisation to meet its goals (Hellriegel, et al., n.d.).

Consider founder of Capitec bank, Riaan Stassen, when he was interviewed; he told the authors that it was his dream to transform the banking sector or financial sector to introduce a profound way of offering financial services. He continued to relate how he joined PSG group of companies Keynes Rational micro-lending business in 2000. He and some managers revisited their old research analysis document during the Boland Bank era as leaders. The results were the opportunities they found in the market and needed exploring.

The authors were briefly informed about the outcome from the market analysis that the key findings were:

- customers were paying high banking fees
- poor customer services
- opaque policies and procedures
- overly complicated products and services
- lots of bank bureaucracy

Riaan Stassen mentioned to the authors that incumbent banks knew about the market analysis and never acted to address or use the advantage of it. However, Riaan and his team started with what is known as the new customer centred and focused banking model and introduced the visionary retail bank. It confirms one of Christensen's concerns in his book of Innovation Dilemma, "why big firms fail". According to the book (1997), the good managers in American businesses do not adapt to new technologies or use the gaps found in the market analysis.

Similar to the American good managers, South African good managers in the banking sector did not heed the outcome results from the market analysis of banking services gaps that could be opportunities for their businesses. Practically it means that the market that Riaan Stassen has chosen to apply his vision to is not appealing to the big bank business. As the leader of Keynes Rational, he went and obtained a retail bank license in 2001. That is when Stassen saw his vision come true that was aimed at creating a new focusing bank that was aiming to serve the lower earning salaries population.

According to the author (Juliet Pitman), Riaan Stassen says that in order to find the gap, it is need for the management to allocate resources and get the best talent that can assist in preparation of the business encapsulating the challenges in the new market gap (Pitman, 2011). Practically putting it is to hire a number of skilled managers that are ambitious enough and have the entrepreneurial talent that will build the business around the strategic vision to address the unmet needs of the population that they have chosen the market for.

A learned organisation always looks at the strategy and vision of the organisation and tries its best to answer what should be achieved by the organisation. The answer always comes from the aggregating appropriate tools, frameworks and assets on how well they can achieve the organisation's goals.

To the authors' knowledge, there are principles Riaan Stassen introduced for the bank to achieve the purposes of its existence, responded by sharing key principles of the business which are as follows:

- Affordability
- Accessible branches
- Easy to understand products
- Simplified

About good managers depending on market analysis and still holding on to mature management reference books, in that context they have difficulty in acting on the information from the market changes to adapt. They might still be refusing to leave the old habit from what they have learned in management old books.

Putting it in context is that Capitec Bank management has deliberately not followed some of the "management reference book" old literature on management, because of how the old literature is based on a static market structure. Considering Porter 5 Forces Model, which is based on competition in any market and was crafted in the era of Static market with the assumption of perfect markets. The challenge with this old model is that their analysis of today's dynamic market does not give a conclusive result and true reflection of the dynamic market.

This model of Porter and other classical models become short to explaining and also short of having the sense linking the theory of the past with the new theory introduced in today's market. Due to the lack of management school of thought where they come from, there is difficulties to explain the new entrants and start-up organisation with their theories when introducing new models and the strategic thinking behind the business in the market.

However, this new business thinking and new models are being introduced are advancing due to new technologies in the market and new Information Communication technology that are linked with the value networks, Because the old theories are not being proactive with the changes in the $21^{st}$ century of the information age. Essentially, it means that the assumption of Porter theory is that market structures are just common in the ways business is formulated; it becomes easy for managers to continue with the old models as they were based from old business theories to do business. Nevertheless, understandably it happens that the business, as they mature, becomes easy to maintain models that works; why will one change a working model, which is very much tested for profit for years? It practically says that managers are important in driving the organisation to succeed, by making appoint that the human capital that is involved understand their roles and work together to meet a common agenda of the organisations. Managers are the leaders and they help in enabling their employees to perform their jobs, so the organisation can benefit from individual inputs in driving the organisation.

The Capitec bank management has observed the gap in the low-income population and went on building their strategy implementing knowledge exploitation into addressing the gap that was identified in the low-income market.  The bank targeted the poor and middle-income population that are underserviced with banking products and services. What turns this marketing concept into a suitable strategic position for the low and middle-income earners is the way the Capitec bank has built its well thought activities and services around this specific low market. The bank offers lower salaries earning services of its kind that which includes the following: a paperless deposit service, long hour's operation services, no queues, banking fees that are the lowest in the market, single simplified daily money management products, and transacting wherever their clients are in the world. These services are addressed in real time to the convenience of the client.

The roles of managers are very important in putting ways of the organisation activities to reinforce one another.  The effective management roles' reinforcement enables competitiveness and finding that balance to help organisations not imitate easily. **Table 5.1** describes the generic management's roles.

**Table 5.1** Managerial roles adopted from Mintzberg

| TYPE OF ROLE | SPECIFIC ROLE | EXAMPLES OF ROLE ACTIVITIES |
|---|---|---|
| Decisional | Entrepreneur | Does environmental scanning of the market in order to identify business opportunities, allocate resources accordingly by taking strategic risks in the process of making a profit. |
| | Disturbance handler | Resolve internal challenges amicable such as services and products faulty. Mitigate and act to deal with any problems facing the organisation. |
| | Resource allocator | Sponsor all the activities in the organisation by allocating resources among different functions and departments of the organisation such as, sets the budgets and salaries of middle managers |
| | Negotiator | Involves all stakeholders on products and services to find or come up with a suitable agreement, which includes trade unions. Establish and sign agreements with other organisations in order to make resources available for joint ventures |
| Interpersonal | Figurehead | Performs public and stakeholder relationships in and outside the organisation such as ceremonial. |
| | Leader | Synchronizes all efforts and direct all activities including the subordinates with motivation. |
| | Liaison | Maintains interpersonal relationships among all managers. Team building within management of organisation. |
| Informational | Monitor | Measure and evaluate performance of managers and correct their poor performance. Scan the internal and external environment for any changes including regulations on leadership. |
| | Disseminator | Communicate the vision and mission of organisation to all stakeholders and partners. Communicate any changes that will affect the organisation and partners. |
| | Spokesperson | Represents the entire organisation to the external environment such as perform spokesperson roles for the organisation. |

**Source:** Overview of management Oxford (Hellriegel, et al., n.d.)

An organisation can outperform its incumbents in the market when it has established a difference that it can entrenches through knowledge, skilled workers and management of the different roles they play. As managers know well strategy is just doing things different and offering value.

> "The only irreplaceable capital an organisation possesses is the knowledge and ability of its people. The productivity of that capital depends on how effective people share their competence with those who can use it." – Andrew Carnegie, 1919 (Berg, 2016) .

Regarding the Capitec bank management and defining their business model, they had to ask and find answers for the model they intend to introduce in the market. The lesson is that models are answers to questions that seek to resolve a market's needs or closing a gap in society.

**Table 5.2** is assimilating a boardroom discussion that managers can try to answer regarding a model they wish to apply for their business, which will meet the unmet needs of the society or a targeted population.

**Table 5.2:** Questions for business models

| PRINCIPLE MODEL QUESTIONS | KEY COMPONENTS |
|---|---|
| Who is the firm | Retail bank |
| Who is the firm customer | Customer base |
| What does the customer want from the firm | Value propositions |
| Where and how does firm create value | Value chain |
| Who are firm's partners, stakeholders | Value network |
| How does firm catch value | Capabilities and resources |
| What does the firm gain and how does the firm sustain the value for its self | Strategy logic and Economic market |

**Source:** business model design in an ecosystem context (Weiller C, 2013)

One of the founding executives, Carl Fisher, acknowledges and commends the direction and the leadership of Riaan. Riaan has decrypted the needs gap in the market and the solution they found was to aggregates the needs with the business model and the system's process of the bank. It means that Riaan is an entrepreneurial manager, who sponsored and supported the resources under his command. He took a deliberate strategic risk and built an organisation around the targeted population's needs. He directed the bank to achieve and meet the needs of the lower income earners.

**Table 5.1** explains Stassen's managing and leadership role in details, for building the business model to fit the needs of the targeted market, while the incumbent failed to adapt to the newfound gap in the market. His inputs and leadership enable the model to be effective and efficient to work and serve the underserviced.

## 5.3 The core themes of the bank

### 5.3.1 Accessibility as disruptive innovation

One of the gaps Capitec management has found is that the majority of Black South Africans are located far outside the city centres; they rely heavily on public transport to commute from their homes to city centres and do all personal services including banking services. The migrations from township homes and rural households through commuting also includes going to and from work. The same majority of workers have one chance to commute to do their banking services mostly on weekends, as the majority of them are factory workers who do not have the luxury of flexi hours. Those who do not have banking accounts do not even bother to travel and simply do not save and just rely on their community stock-fells (Mogodisano).

Capitec Bank armed with the history of the unbanked population, the management was deeply concerned of taping into the services of the left out unbanked population in the sector. They tirelessly evaluated the constraints that faced by the unbanked population.

The following key constraints were the cause of the populations not informed about the banking basics. The *literacy*, as the majority of the population are not educated to the level that is satisfactory or none at all. *Affordability*, as the majority are earning very low salaries, are very poor and perceive banking to be expensive. *Infrastructure* penetration, there are no visible formal mortar-brick-banks around the communities; Lack of *trust* and *complex* banking services including products with lots of pages to read, the perception is that banks are all about making profit out of poor population than help the population; Lack of *skills*, as they do not have ideas how banks operate.

Capitec management had to look at these constraints and build a more simplistic business model that would accommodate the illiterate and semi-illiterate population. The Bank from the model-built trust in the population to start using banking services and to make it more accessible to the unbanked sector. In resolving the accessibility gap, Capitec bank management took a strategic decision to address the gap by coming up with a solution that will bring banking services very closer to the communities through building the branches very closely to working areas, and also at the commuting areas. Such as the taxi rank, bus stations, train stations, rural community centers and the townships around the country where the unbanked live.

The bank has built small manageable bank branches at all areas of commuting and working areas. Capitec went on to making the services more accessible by collaborating with the retail supermarket for customers to access banking services on the way home or on convenient time. The bank's branches focused at low to middle earners. These low salary earners in their majority are working for the factories in the industrial areas around the country.

The bank also introduces the sales persons to do door-to-door at the workplace of the factory workers. The sales person helps them to eliminate their fear of using banking services and assist them to open bank accounts. Capitec bank, recognizing the working hours of the majority of the unbanked, introduced long hours for bank operations to accommodate the customers after work for them so they have access to the bank services. Breaking down the key strategic resolutions that are disruptive and innovative taken by Capitec management to enable accessibility gap in unbanked sector:

- Small branches
- Sales person to factories
- Long operating hours
- Mobile van banking terminals
- No save-box in bank
- Retail supermarket

This accessibility gives an indication of correlation to Christensen's (1997) thesis; he argued that new entrants in the market always become enablers of disruptive innovations primarily at the insignificant market by offering services or product access to the underserved. The disruptive approaches of offering access to the bank services to the underserved population by building infrastructure, introduction of those key innovative ways pointed on the above paragraph.

Christensen continues to argue that disruptive innovation enables more conveniences to accessibility of infrastructure and services than the incumbent organisation in the same market. Taking note from Capitec bank's strategic and disruptive innovation approaches in the insignificant market by introducing simple banking branches at areas of convenience such as the working environment and commuting routes for its customers and partnership with retails.

Capitec bank management had the aptitude to put Christensen's (1997) premise for good strategic decisions for their chosen market. Christensen's thesis illuminates the correlation in the way the bank has applied (introduced) new disruptive technologies for accessibility in the insignificant market, which has enabled the majority of South Africans' accesses to banking services and closes the market gap.

The Capitec bank branches are very simple and less costly to be established; they are very easy to be accessible and are very convenient to Capitec bank customers that are commuting all the time. In addition, not excluding that the operating hours of the bank as acknowledgement of their customers can access the bank after hours. This means that the Capitec as a bank understands the need of their customers. After working hours was a challenge to have banks open, as most of the formal banks are closed at 15:00 before factory workers get to knock off from work.

The disruptive approach was to look at the advantages of existing infrastructures around the areas of their target market and to use them very wisely. That way it gave Capitec bank a competitive edge against the big four for accessibility of banking facilities for their customer target market.

### 5.3.2 Affordability as disruptive innovation

The other needs gap management has found during their study is affordability, where the majority of the South African population have concerns with high banking cost. It was indicated during the key constrains of unbanked needs. The unbanked believe and the perceptions are that: the banking services are expensive so they cannot afford to have banking accounts.

The bank decided to offer the most affordable transaction fees when compared with the incumbent organisations in the market. The bank has designed this model of fees according to their understanding of the customer needs. The bank introduced the Global one product, which allows customers to transact, save, and access their credit without having to open multiple accounts.

Capitec argued that the fee structure is transparent and that they charge very low fees to their customers. Practically the customers know what fees they must pay and why they are paying for those low fees when doing transactions (Capitec Bank, 2014). The banks introduced lower fees to do a transaction for having one account (Global one) with the bank; monthly fees are calculated at R5.00. Since the bank has partnership with other retail stores, the customers are offered cash withdrawals services charged at R1.05; cash withdrawals from Capitec ATMs are charged at R5.00 and a debit order is charged at R3.20 (Capitec Bank, 2014).

In general, the total monthly fees a customer can incur for transacting with Capitec global one account card can estimated at the lowest below R70. It can be compared with other incumbent banks that most of their monthly is way above R100. It means that Capitec customers are very much saving on cost of having an account (ANCHOR CAPITAL : Sean Ashton, 2014), (Capitec Bank, 2014).

Practically, the bank has provided an opportunity of the unbanked population to have access into banking services by opening the Global one account. Furthermore, the Global one account is more cost effective compared with the incumbent banks; **table 6.3** gives details of the comparative fee.

It needs to be noted that the bank product the Global one account has enabled the bank to have a foothold in the South African banking sector. It also continues to offer free access and fixed fees services on its mobile platform and internet banking. The effectiveness of the account addresses the unmet needs of the bank customers for paying low cost and providing banking services that is very affordable to every unbanked person at a monthly fee of R5.00 by 2014's financial year (Capitec Bank, 2014).

Christensen argued that affordability is one of the key principles of the disruptive innovation, whereby the product or services provided is affordable to meet the needs of the underserved. The underserved are all about the service they can afford and do the job they want.

Capitec bank has introduced the model that exactly meets Christensen's argument (2007). The Affordability model is the corner stone of disruption as the bank has competitive edge against incumbent banks by meeting the needs of the underserved, as it is difficult for incumbent banks to restructure their model to adapt to the disruption introduced by the competition of entrant bank.

This Capitec affordability model is very difficult to imitate or copy as it enables the bank to offer affordable banking services and products, which are customized according to the needs of the underserved target market. The incumbent banks faced with the challenge of targeting the top of the market population chasing the continuous innovation rather than disruption.

The Capitec model fees offer free charges for all other related card uses like a money transfer within the Global one account, balance enquiries from all channels like internet banking, cell phone banking and Retail stores. The free fees do not exclude purchases at card machines and online and mail orders, because most of the customers are very sensitive to fees and prices on products and services. The international financial crisis did not assist the situation of customers complaining about higher fees, as some middle incomers started switching banks to exploit the cheapest fees the Capitec bank are offering while the crisis is being resolved (Innovation Agency, 2011).

**Table 5.3:** transaction fees comparatives 2014/15

| FEES | TRANSACTIONS | CAPITEC BANK | ABSA BANK | FNB BANK | STANDARD BANK | NEDBANK |
|---|---|---|---|---|---|---|
| Monthly | Admin fees | 5.00 | 33.00 | 4.95 | 95 | 16.00 |
| Cash Withdrawals | Supermarket/ ATM/ | 1.25, 5.00, 8.00 | 16.45 | Free<br>4.55 | -<br>4.00 | 4.00<br>4.78 |
| Balance | Remote/ Branch/ ATMs/ other ATMs | Free/ free/ free and free 4.50 | - | Free<br>3.00<br>3.00 | Free<br>33.00<br>6.50<br>500 | Free<br>4.00<br>Free<br>4.00 |
| Transfer/ Purchases/ payments | Card/ stop order/ debit order/ payment | Free/ 3.40/ 3.20/ 1.50/ free/ 1.50/ 1.50/ free | 15.00 | 43.00<br>3.50<br>3.20 | Free<br>12.50<br>Free | 14.00<br>14.00<br>45.00 |
| Other | SMS/ Statement in branch/ Returned debit order | 0.40, 3.75, 4.50, 4.50 | - | Free<br>3.20 | 1.00 | Free/month<br>18.00<br>- |
| Deposit | | 4.55 | 16.00 | 4.55 | 45.00 | 18.80 |

**Source**: From business Tech (Business Tech, Staff Writer, 2014)

### 5.3.3 Simplicity as disruptive innovation

South Africa, as a developing market, has a larger population since the dawn of telecommunication industry introduces mobile technology enjoy the uses of cellphone technology. At the same time, the population at large still have challenges with the developments in the ICT platform and industry. The reason is that the technology literacy level is very low; hence, the business models must disrupt the local cultures of using technology and lifestyles. An effective combination of employing of local people according to their region in branches and easy use of technology platforms adopted by the bank. For example, employment of people based on the regional culture for easy communication, eliminating communication and technology challenges, implementation of trust towards technology of biometrics to open accounts. It makes it easy for a customer that is a mineworker, old people and rural people to come open an account with just a fingerprint and face captured, to an agent that are speaking in the same language.

The simplicity model covers several key areas of the customer experiences such as:

**The open plan branch structure**: where the customers can experience the welcoming atmospheres, and where customers can see the staff work and the staff can see customers without the barriers of halls and high glasses

**Paperless**: the bank has appreciated the targeted market as semi-literate, completing of forms will be mammoth task to the customer and time consuming. In addition, it means that the bank should had to hire more people (staff) who will assist in completing forms. The bank took away all the administrative responsibilities away from their customers to let them have a simplified banking experience and services.

**Retailer Supermarkets**: the bank has recognized the advantages the retails stores penetration in the township and took advantage to offer partnership to serve the market with cash withdrawals and balance inquires in the retail stores at the pay point. Customers on their way home or work can use the sale-point of the supermarket to withdraw cash or check the balance. It benefits the customer and the retail stores. The customer benefits from the time spent not looking for banking around and the retail store benefits from charging a fee.

**The global one:** the bank took a leap by introducing a single card that incorporates all transactions in one card. The card has links to the following: savings, the Credit facility, transacting facilities and access to mobile platforms. The global-one product has challenged the traditional banking way of doing business as usual by segmenting the products according to an individual's income and not about needing banking services.

**Queue management**: the bank eliminated queues in the bank branches by introducing a queue management system that issues a coupon with a number and descriptive needs of customers when entered the bank. This process enables the customers to enjoy the open plan environment or even to go attend other errands outside the bank and come back to find services still waiting to be offered to them when the number is called

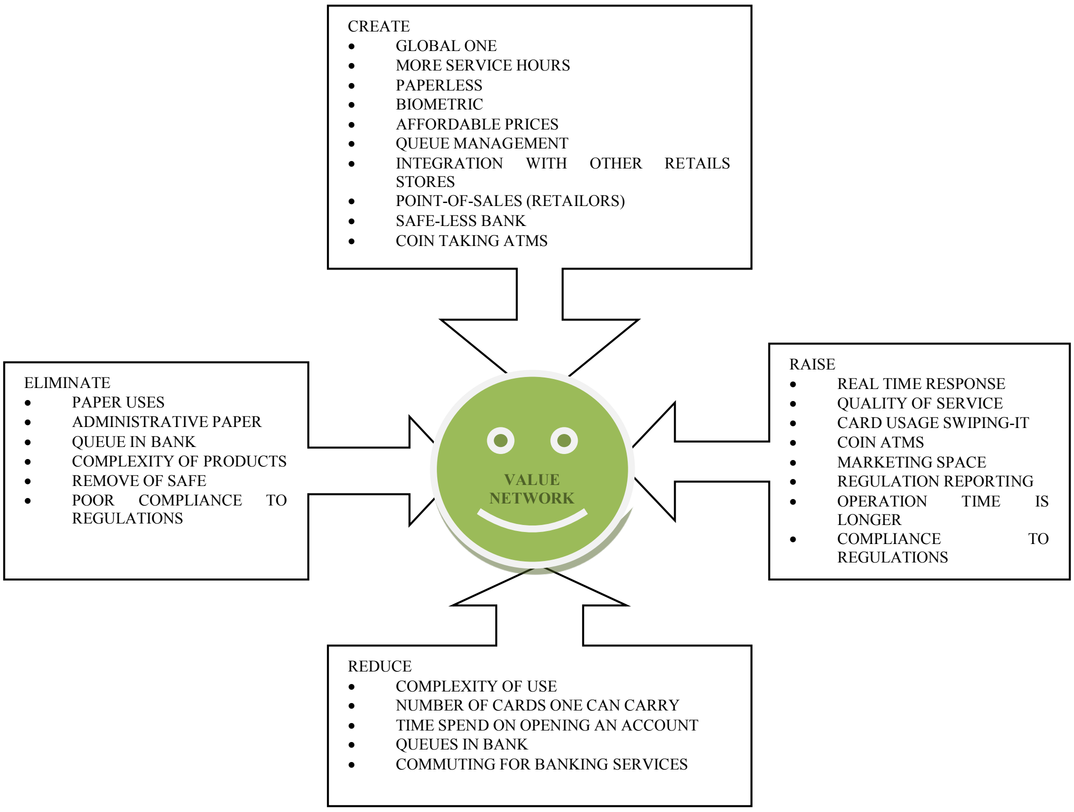
Christensen, on the base of simplicity, pointed out that the product or services gradually appeal to the low-end users, which are the customers that are willing to use the product or services that are poor in performance or functionality. He points out that the product or services improves as time goes by and start to climb the performance curve to end up attracting the higher market users. Christensen will acknowledge the simplicity of the product and services of the entrant bank has done for the low market. The bank customers have showed the willingness of having and buying the services and product that are simply to use and understand. Such as global-one card used at any place including the retails supermarkets. The portability of carrying one card for all type of transactions is appealing to the low-end market. The customers get attracted to the product and services that came with more attributes that cannot found somewhere else. Christensen did argue that the convenience of services or products simplifies customers' lives and experience.

### 5.3.4 Personal services as disruptive innovation

Generally, in South Africa, the four banks had adopted the strategy to get customers to use more of their ATMs than they come in the branch for services. It achieved by having increased the fees to use services in the branch. Capitec bank had come up with the counter approaches by inviting their customers to come into the bank branches and use the services that dedicated for them. The bank argues that face-to-face services offered in the branch gives customers the friendly and sociable experiences. Some of the bank's personal services linked to the value networks that the bank has created with other organisations and within the bank process. **Figure 5.1** bellow elaborates more on the value network that been created by the new entrant bank in the market.

Christensen and Bower pointed out that value propositions are innovations that brought by the new organisation to offer the customer value. New entrants or organisations will be creating value networks that enhance value proposition towards a customer's value enabling. The principle is how the bank have realised that the products and services process that they are offering towards customers can affect the value they offer them. The bank has determined the needs of its customers' target markets and incubated the solution according to the needs of the targeted market. As Christensen et al., 2009 argues, the new entrants in the low market can provide a model that changes the accustomed tradition by solving the problems and implementing solutions that link customers with value propositions for affordable products and services. The value networks are channels used for products and services helping to enable the organisation to serve its customers. Putting it to reality, without this network channels, the Capitec bank would not be able to efficiently serve or provide products to its customers.

**Figure 5.1** Capitec four-action framework-author own illustration.




**Source:** Author idea frame from Kim and Mauborgne 2010 (Islam & Ozcan, 2012).

In that regard, the bank has a partnership with retailors to serve customers at an affordable cost for withdrawing and asking for the balance at the point-of-sale. It also offers the global -one card that functions with a microchip that is serviced by the Master card. The global -one card can be used at every ATM that is Master Card compliant.

Practically, Christensen means that low market needs, demand that new entrants should bring the business model that is suitable in solving the needs of the customers. The impact of product or service should meet the functionality of customer threshold. Global-one can, for example, be used at retail supermarket to withdraw and used as credit request.

The Capitec banking model has created cross sector partnerships that find or enable value networks for its customers. There is a lot of value that is exchanged in the partnership created, such as withdrawing in the supermarket and the ICT systems that make it possible for the bank to be very compliant to regulations. These cross-sector relationships continuously assist organisations that are partnering to leverage each other strength. These capabilities for partnership enable value networks that are very needed in the knowledge economy; this shows the strength of the business model and complementing the partnership.

### 5.3.5 Regulation as disruptive innovation

Christensen has not been outright dealing with the regulation changes in organisations that are entering or creating a new market. Inherently every sector in the business is globally govern by rules in some form or another. The same rules can be a catalyst that entrepreneurs really want to enter a sector in the business village.

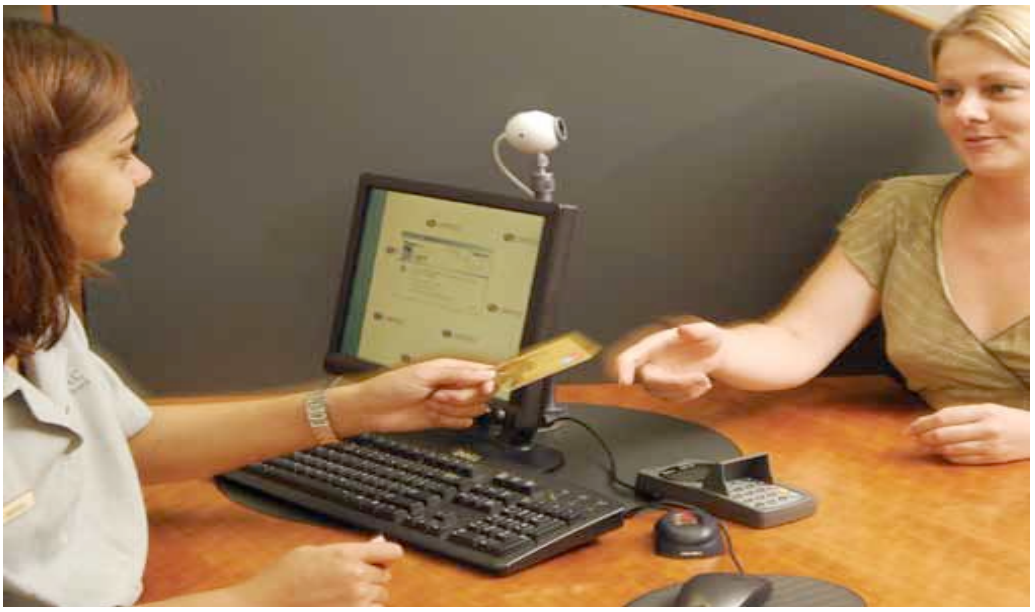
The Financial environment or sector has been highly regulated; there are a number of laws, regulations and bodies that emphasize the compliances of the sector. The primary task of the bodies and the laws is to protect the customers from mismanagement of people funds by organisations that are entrusted with. Capitec bank had to obtain licensing to operate as a retail bank. Without this license, Capitec will lose and will not operate as a bank or financial service provider. All retail banks and organisations are operating or offering payment or deposit-takers and have credit requirements to meet specific laws and regulations to provide such services. It means that there are a number of rules that are meant to protect customers from losing their money by means of unregistered organisations or those operating outside the scope of the laws. these laws are also to promote the way the banking process should be operated, including the safety of the bank's technology networks and integrity of the banking system.

The technology development poses a challenge for banks to continue being up to date with the regulations that are constantly behind and to be enacted to laws. It is the current example of a Cyber-security challenge. with this development, banks need to relook at their process and business models to comply with regulations to have cyber-security programs. Internationally, regulators have argued that banks should be monitoring their cyber-security capabilities. The vulnerabilities are not only with cyber space, but with the level of literacy in the targeted market. Capitec bank has partnered with several organisations to enable the bank to leverage technology by offering services and products in cyber space. For example, TCS Bancs' organisation providing the technology solution that made it possible for the bank to offer core banking and payments solutions. The solution enabled the bank to create a paperless banking solution for Capitec bank, where customers can open an account without completing a paper.

In South Africa, with the mobile technology penetration in the country, regulations needed to be amended to accommodate the alternative banking channels. These new channels offer the banking sector a competitive edge. It is noted how the technology have enabled the capabilities of Capitec bank to be very competitive and compliant to regulations.

The design of the bank brand and the branches structures; the branches are just simple open plans that are user friendly to any customer that comes in.

**Figure 5.2:** The Capitec Bank Biometric system



BIOMETRICS GLOBAL ONE CARD PAPERLESS

**Source**: Biometric in bank ( Glenn Stafford, n.d.)

## 5.4 Disruptive innovation by branding

Capitec bank services' model is mainly targeted at customers in the low-income market; its strategy is to start at the bottom and work its way up into the higher income market as time goes. So far it has been gradually moving in the direction up from bottom into the middle-income market by marketing its brand in an appealing and disruptive way.

The disruptive branding model of Capitec was brought by very interesting and innovative ways. The methodologies applied to market the brand are intended to make it the most popular among the target market. The approach has kept lots of customers' interest in the bank; in a way the bank is distinguishing itself from other incumbent banks. The bank's key innovative branding incorporated the following disruptive methodology:

**#AskWhy:** the bank strategy here was to source or incite the South African population to ask questions to their bank for customer experience. It opens a discussion between a customer and the bank on issues that relate to banking services and products, how well they can be adaptive or how well the customer can influence how their money is supposed to create value for them, to be efficient towards them (the customers) and benefit more efficiently in having a bank account.

**Speak Upspeak:** Capitec did a social media campaign where customers could speak up about their banking interactions.

**Product placement on TV show:** Traditionally, organisations advertised during the intermissions of TV shows. Capitec bank came up with a campaign to sell their brand to the target market on a television show itself. Instead of an advertisement during the break, the brand was placed in the show itself.

The aim of the bank is entering their targeted market domain, the population that is watching the TV series Generations, which is estimated around seven (7) million viewers. Capitec introduced a Capitec Bank brand as part of the TV series storyline where the bank took an unusual role as a character in the series for several months. The actors of the series were actively participating in advertising the services and products of the bank and even showed how easy and less costly the services are. Regarding the TV series, the viewers were given an opportunity to stand a chance to win an opportunity to be part of the cast of the show by opening an account with the bank which is an automatic competition entry. The new approaches of advertisement were received well and the Capitec bank brand sparked lots of interest from the viewers who were soon to become Global -one account holders. That approach broke the traditional way the banking industry sells and markets their brands. It was the first time in TV production that a product and services were integrated in the storyline of a series. The innovation methodology succeeded in getting the attention as far as the target market is concerned. It met the expectation and the hype it created by reaching the target audience in the comfort of their home and had a major effect on deciding to open accounts with Capitec bank.

**Table 5.4**: The comparative banking models

| Digital Banking Model | Traditional Banking Model |
|---|---|
| "Simplicity is the ultimate sophistication" The Customer is the king as the center of banking experience | The Bank branch is the center of banking experience |
| ICT solutions makes it simple for customers to choose how to interact with the bank. Remote banking solutions. Some may never enter a branch. | All interactions with the customer originate with a branch experience. |
| Global one money management has no boundaries and it is one solution for all accounts | Customer definition is confined to the branch footprint |
| Digital delivery is the centerpiece of products and service offerings. | Digital delivery is layered on the top of the branch system. |
| Products and service offerings are tailored to customer's delivery preference and | Duplicative products and services are offered through various channels and complex |
| Channels are non-existent, which provides a consistent customer experience. | Inconsistent customer experience across channels. |

**Source**: Adopted from (Padmaaavathy & Adalarasu, 2015)

### 5.5 Summary:

The Banking industry is very much dependent on trust; banks do everything to make sure that their customers trust them with their money. In the banking industry it is not easy to make people change from one bank to the other; they need a loyal and trustworthy brand to follow.

The adoption of social media technologies by Capitec has boosted the bank business and branding. The impact of the social media networks (platforms such as Twitter, Facebook, blogger networks and YouTube) had a profound effect in attracting the lower and middle salary earners. All these platforms help the bank to disseminate information and educates the users about the bank services and products. As the Capitec bank model is based on the technology platform, it came out more as a natural thing to do for the bank innovation brand marketing and collaborations. According to a study by Cohen (2009), product research is one of the key tools in finding what the target market is thinking about the products and services they get from any business. The benefit of the social technologies is the organisation knowing their customers and building proper perceptions about the services and products. With Capitec bank it is revealed that forums like #AskWhy and adopting a reality TV script enabled the bank to reach and spread its information across a large number of people and become an interactive bank that is making use of these platforms for competitions. The technology forums and platforms for this kind of interaction with their customers based on real time and some static time, enable the bank to build its reputation and credibility among customers and potential customers.

The study of Capitec cases with its model for customer services, marketing, production, transparency, and customer's base research has legitimized the bank in the financial sector. The legitimism stems from the current rating of the bank by South Africa Customer Satisfaction Index (SACsi). According to the SACsi poll the bank is rated number one (1) for four years in succession. The recent rating for 2015 has been rated 83.8%. It means that the majority of Capitec bank's customers have spoken up about their satisfaction with the bank's customer services' satisfaction;

However, the bank is not only making waves locally, but finds itself to be recognised internationally. Capitec has been bestowed with the title of the best bank in the world by meeting the criteria of business model, customer satisfaction, the brand and quality of the Organisation from Laferty Bank Rating agency. Awards and recognition for the bank have been coming thick and thin mostly from the financial and brand rating agencies (Fin24, 2016). According to the executive marketing and corporate affairs Carl Fischer interviewed by Alec Hogg from Biznews, “What is happening is that the moment the client wants to do banking he wants that trust. He needs to understand the environment that he goes into.” (Biznews, Alec Hogg, 2016)

Human beings open up with the people they have created a trust bond with, similar to customers they only do trust the services or products of a business with the person or organisation that have created that link of trust with them. It means that the bank does not demand trust, but have developed a trust model that is working to grow among the population and target market in South Africa. This trust becomes embedded with their customers’ base through the brand selling on technology platforms and the innovative model.

To sum up, two important changes to the existing theory on disruptive innovation have been proposed in these sub-sections. Firstly, the focus should be shifted from different performance parameters towards how value is created and distributed. Secondly, customers and the surrounding value network can be conceptualized as a set of actors that perform activities and control resources. Hence, customers cannot be regarded as homogenous units with one specific utility function, but rather as a collection of actors with different capabilities sometimes governed by different incentives.

# 6. CONCLUSION

Shareholders and other stakeholders build organisations structures not to resolve poverty challenges in any society, but for creating profit to the owners and shareholders. What is expected of the new entrants is to make profit at the level of poverty line, but not to solve the problem of poverty itself.

The thesis described how a new entrant bank introduced its low-cost business model and how the dynamics of technological possibility and managerial entrepreneurship played out in the real world. What the new entrant bank did could be described in terms of Christensen's theory of disruptive innovation. In addition, looking at it this way helps us to better understand the effects of such disruption brought by entry level organisations in the South African market context.

The character of disruptive innovation is to introduce a new technology which makes new processes, products, services, and business models possible that are cheaper. However, to translate the technological possibilities into those processes, products, or services, deliberate leadership and a new way of looking at the business and strategy is necessary by the top-management of an organisation.

The banking landscape in South Africa changed drastically in recent years, due to the significant role played by new entrant banks on the periphery. The significant and critical role they play to introduce new customers to the main banking services, as results there is significant uptake of banking products from the new entrants (Darrel, et al.). Traditionally the retail banks in South Africa did not make significant ground in nurturing attraction to underserved population. They have believed that the underserved market is a risky market and it is not profitable to give full banking services. Hence the lack of passion to be innovative for the poor segment.

This thesis on the case study of Capitec bank has showed that innovations introduced by the new entrant organisation can have a significant effect in the niche segment of the market. Hence the Capitec bank continue to register a significant number of customers monthly and continue to top the headlines.

This thesis has managed to show a number of disruptive innovations that were part of Capitec bank's success in portraying itself as "the technology based bank". The most visible example is the paperless services and queue management and the structural design of the internal of the bank and lastly the use of technology in registering customers (biometrics). The paperless approaches were to do away with a form-completion before going to a teller and also do away with paper documentation trail during the registration of a new customer in the bank. To open an account a customer just need an Identity Document and proof of residence.

The bank has simplified its structural design of all branches, it is a friendlier open plan with clear colour coding of red, white and blue. The irony is that American superheroes normally are in red, blue and white. Does that mean the bank is here as a superhero to conquer the market and dominate the four retail banks in South Africa? Only time will tell as even Christensen (1997) postulated in his seminal work, there is nothing inevitable about the down-fall of established organisations as a result of a new entrant; perhaps they can pivot too and adapt to the disruption brought about.

Another advantage Capitec has over the established banks is the queue management system that it employs. Their system gives customers the value of not queuing or standing in any line anywhere in the bank branches, reducing lines only to the ATM's, and so it helps to contribute to compliance with the regulations and statistical data for management to make proper strategic decisions. The traditional paper-form process for registering a customer is a tedious process and there were inevitably many paper documents a customer must complete and also a number of supporting documents that have to be brought along when opening an account. The invisible relationship advantage of Capitec lies with the collaborations and networking relations with other Information Technologies organisations that made the technology-driven backbone of the bank possible. The biggest invisible innovation of the bank is that all its branches are cashless banks (Capitec Bank does not host cash in the bank, it means that they do not have a physical safe in all branches) and this has a serious security advantage.

The thesis also highlighted the leadership and management decisions capabilities that made Capitec a disruptor. The entrepreneurial attitude and fearless approaches to new challenges of the bank management took an opportunity to influence government policies towards a drive for inclusivity in the financial sector. Of course the socioeconomic demand was always there, but a permissive regulatory environment was needed in addition to low-cost business models to make it possible to extend credit to the periphery of the banking market.

There is some agreement with the theory of Christensen (1997) that management need to take a strategically risky decision to create a separate organisation from the main organisation in order to succeed in dealing with new innovation or disruption innovation. The Capitec bank leadership decisions have coincided with the assumption that in order to deal with disruptive innovations, management needed to be allocating resources and separating the organisation away from the old micro-lending business model. Hence, the decision to consolidate all their micro-lending business to come up with the new retail business model of bank.

Technological change or introduction of technology in society and industry has always been considered an advancement of socioeconomic situation of society and business. Literature has been written by scholars for dealing with the technology changes (Christensen and Raynor, 200; O'Reilly & Tushman, 2004) and many more scholars that are concern with disruptive innovations.

The technology responsiveness of an organisation is very critical, the study (Chapter 3) has shown that the kind of partnership made between Capitec bank IT platforms and several organisation on IT solutions. Example of Qmatic, Scala Platform, Synthesis & tXstream and POCIT solutions. It enabled the responsiveness of Capitec IT platform to meet the technologies changes, making process seem simpler. Hence, the bank took strategic decision to open up to third parties' technological capabilities to enable the bank process intelligently its business. Unlike traditional bank whom still relied on historical technology platforms.

The study has shown how the new entrant organisation introduced a new technology-based business model that is aimed at serving the underserviced segment of the market and was therefore disruptive to the entire banking industry sector.

## 6.1 Managerial implications

Christensen (1997) brought the disruptive innovations as challenge for managers in organisations. He argues that managers face a serious task of allowing resources to be focusing on disruptive projects. Most managers are focused on continuous an innovation, which shows that the majority of managers are profit driven that customer oriented. Also, managers face the challenge of finding the balance between top-end customers and poor customers, their organisational models turn to be not agile to changes or demands of their poor customers in the specific market.

The thesis has shown the management and leadership style of the organisation are also important issues in addition to technological change. The strategic decisions should be not only based on profit only but also should be focuses on organisational resource distribution and capabilities to recruit talent for the next big thing to enable changes for the entire organisation.

Lesson that need to be taken from the study is that leadership and management is not confide into speciality of a field but the capabilities of managers that have a will to be entrepreneurs in any space of business. Any business really needs partnerships with any possible sector to assist its competitiveness. Retail stores and other industry organisations contribute some way to competition advantage the way the brands are marketed and number of campaign that has proven worth to assist the organisation to grow and compete in the market they have chosen.

The theory also pointed that management needed to also to focus on the business side of organisation not only focus on the customers, management compliance to the regulations bodies so that continuation of business cannot halted due to compliances.

The other lessons are that changing of organisational culture is also very key and important to meet the specific needs of a specific market. Employing employees that are regionally oriented need to be management priority as this lead to organisational branches receiving value add through customer satisfactions.

## 6.2 Future research

The thesis emphasis was to use the Christensen (1997) framework of disruptive innovations in assessing the innovations done in the banking industry, with the context of South African financial sector. The effects of disruptive innovations in the South African banking industry.

The theory of disruptive innovations gets to challenge organisation in any sector in preparing for the new wave of technological innovations that will challenge their leadership styles. The theory has been uncovering numerous finding of management lack of interventions during the technology changes.

Christensen (1997) has developed a framework of disruptive innovation, argued that any industry faces disruptions. There is no research had been done to find the implications of disruptive innovation in the banking services sector? There is no enough scientific data that provide findings for new entrant organisation in banking sector that have influenced the sector to respond to the technology changes. It will be very interesting to see a robust research done on that level of sector. Also, to compare with different type of economies example growing economies and first world economies to explains and describe the challenges faced by organisation in the different economies and regions of economic activities.

The academics thus far have not provided a definite definition for the disruptive innovations, hence the challenge of trying to understand the phenomenon of disruptive innovation influenced or influencing regulation changes that are passed in policies of government. It will be very fruitful exercise of research to find out what new organisations were entering sectors, did they bring disruptive innovations, or they just brought continuous innovations.

The thesis focus was a on a new entrant organisation in the financial sector and its effect to the sector based on the framework of disruptive innovations by Christensen (1997). It will be a good idea to research one key component of the framework, which is the "replacement of other organisation by a new entrant organisation" in the same sector, not for getting that the period is very much important in the process.

Contrary to the banking sector, the technology and the services are of quality and top-class products and services. For the purpose of new research to find out and explain the low-end products, and services as professed by Christensen (1997) theories. Can the technologies innovations be associated to be low end products or services? Or is it just a supporting platform for services that are of low quality? But is it true reflection of the banking sector.

With the thesis using the framework from Christensen (1997) of disruption innovation, it will be benefiting to do a research in the context of (simple) poor performance technology and sophisticated technology in the banking sector. The question stem from the banking sector technologies implemented are not just too good to do the job only.

Christensen (1997) mention management and leadership during the disruption innovation. It will be interesting to find out how the effect of Knowledge Management in an organisation during the disruptive innovation phase. For the future research not forgetting the technology life cycle. The interesting question on this research, is whether disruption due to the technology life cycle or due to Porter's philosophy?

The theories of knowledge management in an organisation can be used to describe and better explains the existences of skills workers and disruptive innovations, it will share an insight in how skilled workers are influencing innovations and the roles leadership capabilities supporting disruptive projects. However, has academia managed to find solutions for practitioners to resolve the barriers of managers failing to deal with the disruptive phenomenon? Thus, one wonders if the disruptive innovation is a concern only to managers or is organisation at large.

The case study in the thesis is a young organisation and in a developing country. Its growth in the past 15 years, its operations continues to make inroads in the financial sector. It is a waiting game to see if they could take the strategic decision for the business models to go global.

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